

June 9, 2008

Diana Mason State of Utah Department of Oil, Gas & Mining 1594 West North Temple, Suite 1210 P.O. Box 145801 Salt Lake City, Utah 84114-5801

Re: <u>Directional Drilling R649-3-11</u>

NBU 1022-24B1AS

Surface: NWNE Sec 24-T10S-R22E 1052' FNL & 1583' FEL Bottomhole: NWNE Sec 24-T10S-R22E 150' FNL & 1375' FEL

#### Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore, L.P.'s Application for Permit to Drill regarding the above referenced well on June 9, 2008, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling of Wells.

- Kerr-McGee's NBU 1022-24B1AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to access portions of our lease which are otherwise inaccessible due to topography.
- Furthermore, Kerr-McGee hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee requests the permit be granted pursuant to R649-3-11.

Sincerely,

Kevin McIntyre

Regulatory Analyst

RECEIVED

JUN 1 0 2008

DIV. OF OIL, GAS & MINING

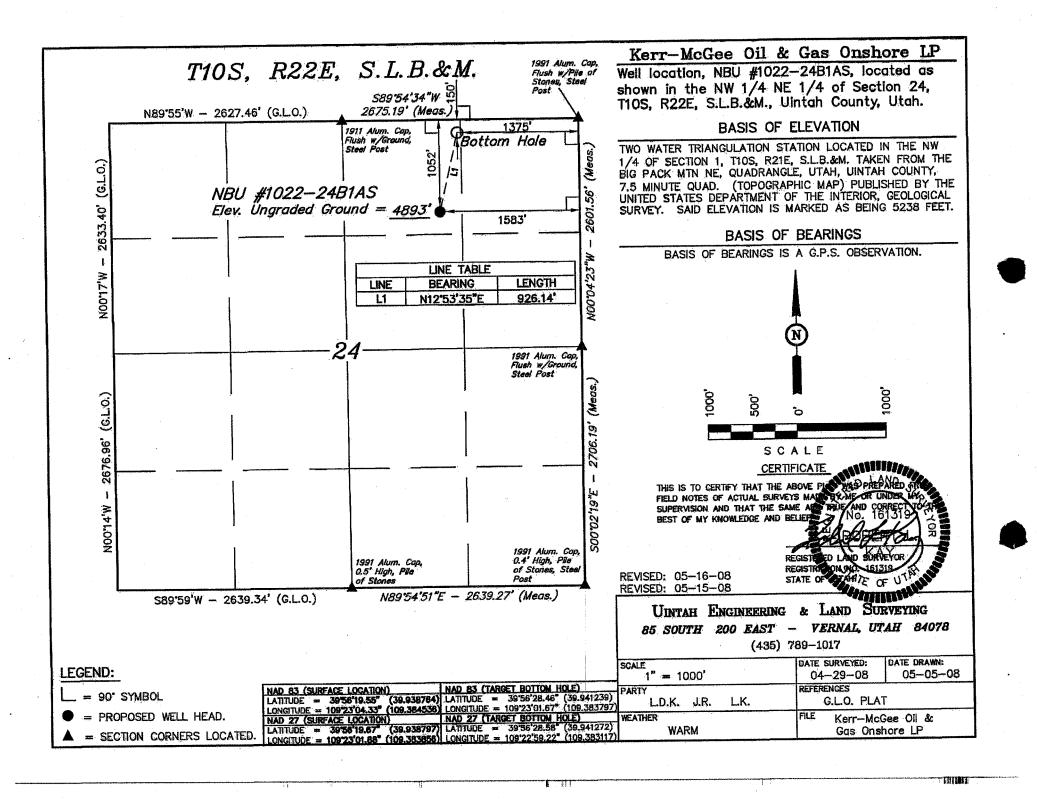
STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM	•

AMENDED REPORT	Į
(highlight changes)	

		APPLICAT	ION FOR I	PERMIT TO	DRILL		5. MINERAL LEASE NO: ST ML 23610	6. SURFACE: State
1A. TYPE OF WO	DRK: D	RILL 🗸 🗆	REENTER 🗌	DEEPEN			7. IF INDIAN, ALLOTTEE OF	TRIBE NAME:
B. TYPE OF WE	il: OIL 🗌	GAS 🗹	OTHER	SIN	GLE ZONE MULTIPLE ZON	E	8. UNIT or CA AGREEMENT 891008900A	NAME:
2. NAME OF OPE Kerr-McGe		onshore, Li	>				9. WELL NAME and NUMBE NBU 1022-24B1	
3. ADDRESS OF P.O. Box 1		<sub>спу</sub> Denve	r	E CO ZIP 802	PHONE NUMBER: (720) 929-6226		10. FIELD AND POOL, OR V Natural Buttes Fi	
		ES) 638081	STAT LX 44220	074 34.	938812 -109.3838	37	11. QTR/QTR, SECTION, TO MERIDIAN:	
		. & 1583' FEL		X 44222		1		S 22E
AT PROPOSED	PRODUCING ZO	NE: NWNE 1	50 FNL & 13	75' FEL 3	22 x 7.941290 -109.383	1.50		
14. DISTANCE IN	MILES AND DIRE	CTION FROM NEAF	REST TOWN OR POS		1. 141 210 10 1. 30 9		12. COUNTY:	13. STATE:
33.3 mile	s east of O	uray, Utah					Uintah	UTAH
15. DISTANCE TO	NEAREST PROF	PERTY OR LEASE L	NE (FEET)	16. NUMBER O	F ACRES IN LEASE:	17. NUI	MBER OF ACRES ASSIGNED	TO THIS WELL:
1052'					200			10
18. DISTANCE TO APPLIED FOR	O NEAREST WELL R) ON THIS LEASE	L (DRILLING, COMPI (FEET)	ETED, OR	19. PROPOSED		]	ND DESCRIPTION:	
3000'	CHOWNETHE	R DF, RT, GR, ETC	\.	22 ADDDOVIM	7,881		30005237	
4983'	(SHOW WHETHE	KDF, KI, GK, EIG	<i>).</i>	22. APPROXIM	ATE DATE WORK WILL START.	1	days	
<del></del>								
24.			PROPOS	ED CASING A	ND CEMENTING PROGRAM			
SIZE OF HOLE	CASING SIZE,	GRADE, AND WEIG	HT PER FOOT	SETTING DEPTH	CEMENT TYPE, QU	ANTITY, Y	IELD, AND SLURRY WEIGH	т
12 1/4"	9 5/8"	J-55	36#	1,500	Premium Cement	21	5 sx 1.1	8 15.6
	-				Premium Cement	5	0 sx 1.1	8 15.6
7 7/8"	4 1/2"	I-80	11.6#	7,754	Premium Lite II	76	0 sx 3.3	8 11.0
					50/50 Poz G	75	0 sx 1.3	1 14.3
					·			
	<u> </u>			A.T.T.A.	OUNTENTS.			
25.					CHMENTS		<u> </u>	
VERIFY THE FOL	LOWING ARE AT	TACHED IN ACCOR	DANCE WITH THE U	TAH OIL AND GAS C	ONSERVATION GENERAL RULES:			
<b>✓</b> WELL PL	AT OR MAP PREP	PARED BY LICENSE	D SURVEYOR OR EI	NGINEER	COMPLETE DRILLING PLAN			
<b>✓</b> EVIDENC	E OF DIVISION O	F WATER RIGHTS	APPROVAL FOR USE	OF WATER	FORM 5, IF OPERATOR IS PE	RSON OF	COMPANY OTHER THAN T	HE LEASE OWNER
					<u> </u>			
	Kovin	Molnturo			тить Regulatory An	alvet I		
NAME (PLEASE	PRINT) Kevin	•	<del></del> -	<del></del>	4,1100	ialyst i	<u> </u>	
SIGNATURE		_ n			DATE 6/9/2008			
(This space for Sta	te use only)		;		roved by the n Division of	D	ECEIVED	
			ee sale sale		as and Mining			
API NUMBER AS	SIGNED:	13-147-4	0129		APPROVAL:		JUN 1 0 2008	
		,	· · · · · · · · · · · · · · · · · · ·	Date:	7479	DIL C	OF OIL, GAS & MINI	NG
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(11/2001)



### NBU 1022-24B1AS NWNE Sec. 24, T 10S R 22E UINTAH COUNTY, UTAH ST ML 23610

### **ONSHORE ORDER NO. 1**

#### **DRILLING PROGRAM**

#### 1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Depth</u>
0- Surface
483'
796'
1164'
3519'
5732'
6564'
7137'
7700'
7881'

#### 2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	<u>Formation</u>	<u>Depth</u>
	Green River	483'
Water	Top of Birds Nest Water	796'
	Mahogany	1164'
Gas	Wasatch	3519'
Gas	Mesaverde	5732'
Gas	MVU2	6564'
Gas	MVL1	7137'
Water	N/A	•
Other Minerals	N/A	-

#### 3. Pressure Control Equipment (Schematic Attached)

Please refer to the attached Drilling Program.

### 4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

#### 5. <u>Drilling Fluids Program</u>:

Please refer to the attached Drilling Program.

#### 6. Evaluation Program:

Please refer to the attached Drilling Program.

#### 7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 7881' TD, approximately equals 4886 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3152 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

#### 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

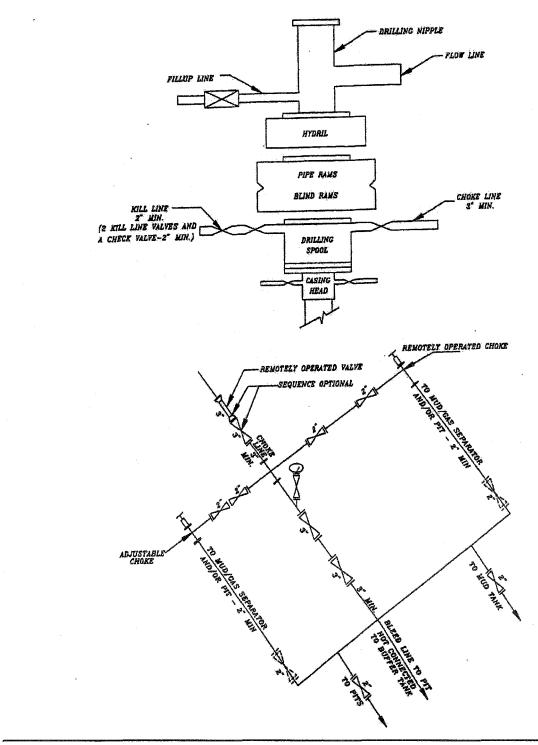
#### 9. <u>Variances:</u>

Please refer to the attached Drilling Program.

#### 10. Other Information:

Please refer to the attached Drilling Program.

### **EXHIBIT A**



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

### NBU 1022-24B1AS NWNE Sec. 24, T 10S R 22E Uintah County, UT ST ML 23610

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. Directional Drilling:

In accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

#### 2. Existing Roads:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

#### 3. Planned Access Roads:

Approximately 2.3 mi. +/- of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

#### 4. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

#### 5. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 20,438' of 4" pipeline is proposed. The total distance on state land is 16,291', the total distance on BLM land is 3,207, and the total distance on Fee land is 940'. Refer to Topo D for the proposed pipeline.

#### 6. <u>Location and Type of Water Supply:</u>

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

#### 7. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

#### 8. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural

#### NBU 1022-24B1AS Surface Use & Operations Plan

Page 3

drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility, Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond, SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond, Sec. 2, T10S, R23E.

#### 9. Ancillary Facilities:

None are anticipated.

#### 10. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

#### 11. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

#### 12. <u>Surface/Mineral Ownership</u>:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

#### 13. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey has been completed and is attached.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it Within 460' of any non-committed tract lying within the boundaries of the Unit.

#### 14. Lessee's or Operators's Representative & Certification:

Kevin McIntyre Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6226 Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre

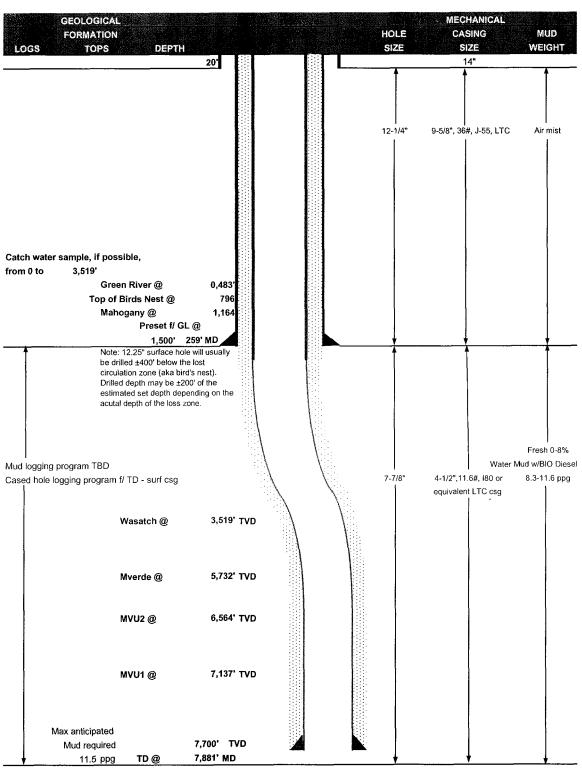
6/9/2008

Date



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	June 9, 2	008	
WELL NAME	NBU 1022-24B1AS	TD	7,700'	TVD	7,881' MD
FIELD Natural Butte	s COUNTY Uintah	STATE Utah E	ELEVATION	4,893' GL	KB 4,908'
SURFACE LOCATION	NWNE 1052' FNL & 1583' FEL, Sec. 24	T 10S R 22E			
	Latitude: 39.938797 Longitud	de: -109.383856		NAD 27	
BTM HOLE LOCATION	NWNE 150' FNL & 1375' FEL, Sec. 24,	T 10S R 22E			
	Latitude: 39.941272 Longitud	de: -109.383117		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: UDOGM (MINER	ALS AND SURFACE),	BLM, T <u>ri-Co</u> u	inty Health Dept.	





#### CASING PROGRAM

									DESIGN FACTO	DRS
	SIZE	INT	ERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	C	-40'							
	\			14.				3520	2020	453000
SURFACE	9-5/8"	0	to	1500	36.00	J-55	LTC	1.21	2.88	10.68
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	7700	11.60	I-80	LTC	2.67	1.38	2.58
									ĺ	
	<u> </u>								1	

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 0.0 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

MASP

3152 psi

#### CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1	1	+ .25 pps flocele		,		
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
	ŀ	+ 2% CaCl + .25 pps flocele				
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to sur	face, optio	n 2 will be	utilized	
Option 2 LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
	1	+.25 pps Flocele + 3% salt BWOW				
TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
		+ .25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION LEAD	5,230'	Premium Lite II + 3% KCI + 0.25 pps	570	60%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	2,470'	50/50 Poz/G + 10% salt + 2% gel	700	60%	14.30	1.31
		+.1% R-3				

<sup>\*</sup>Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

#### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.							
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.							

#### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.
BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder &
tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper
& lower kelly valves.
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.
ENGINEER: DATE:

DRILLING ENGINEER:		DATE:
	Brad Laney	
DRILLING SUPERINTENDENT:		DATE:
	Randy Bayne	



## **Drilling Services**

## **Proposal**



### **ANADARKO - KERR McGEE**

NBU#1022-24B1AS (1022-24B PAD)

**UINTAH COUNTY, UTAH** 

**WELL FILE: PLAN 1** 

JUNE 5, 2008

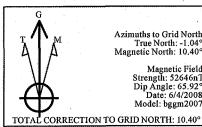
Weatherford International, Ltd.

15710 John F. Kennedy Blvd Houston, Texas 77032 USA +1.281.260.1300 Main +1.281.260.4730 Fax www.weatherford.com



#### KERR MCGEE OIL & GAS NBU #1022-24B1AS **UINTAH COUNTY, UTAH**





1000

1500

2000

Azimuths to Grid North True North: -1.04° Magnetic North: 10.40°

Magnetic Field Strength: 52646nT Dip Angle: 65.92° Date: 6/4/2008 Model: bggm2007

					SECTION	DETAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1 2 3 4 5 6	0.00 1560.00 2433.70 3549.66 4598.09 7881.09	0.00 0.00 26.21 26.21 0.00 0.00	11.92 11.92 11.92 11.92 11.92 11.92	0.00 1560.00 2403.54 3404.75 4417.00 7700.00	0.00 0.00 192.15 674.42 905.00 905.00	0.00 0.00 40.55 142.34 191.00 191.00	0.00 0.00 3.00 0.00 2.50 0.00	0.00 0.00 11.92 0.00 180.00 0.00	0.00 0.00 196.38 689.28 924.94 924.94	PBHL-24B1AS

WELL DETAILS Latitude Northing Longitude Slot +N/-S+E/-W Easting 2093446.00 39°56'19.672N 109°23'01.878W N/A NBU 1022-24B1AS 0,00 0.00 14507861.00



KB ELEV = 4911'GR ELEV = 4891'

FIELD DETAILS

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

etic System: Universal Transverse Mercator (USfeet)
Ellipsoid: NAD27 (Clarke 1866)
Zone: UTM Zone 12, North 114W to 108W
etic Model: bggm2007 Geodetic System:

Magnetic Model:

System Datum: Mean Sea Level Local North: Grid North

SITE DETAILS NBU 1022-24B PAD SECT 24-T10S-R22E

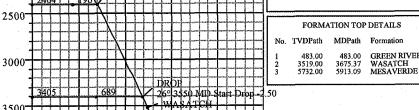
Site Centre Northing: 14507861.00 Easting: 2093446.00

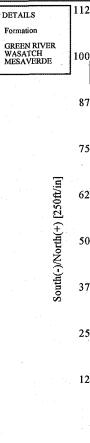
Ground Level: 4891.00 Positional Uncertainty: 0.00 Convergence: 1.04

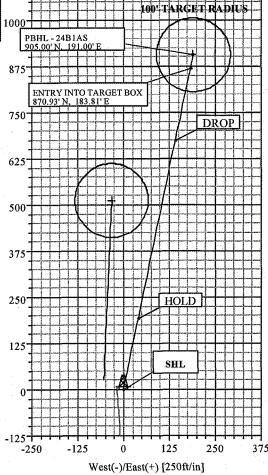


+E/-W Northing Easting Shape TVD +N/-S Name

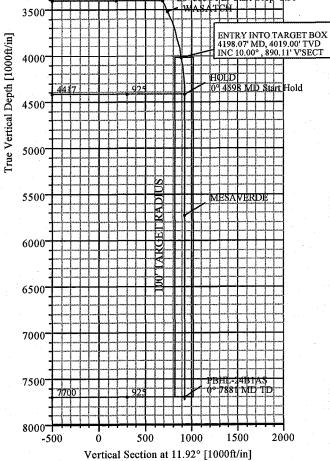
14508766.00 PBHL-24B1AS 7700.00 905.00 191.00 2093637.00 Circle (Radius: 100)







Plan: Plan #1 (NBU 1022-24B1AS/1) Created By: L WINCHELL Date: 6/4/2008





## Weatherford Drilling Services **Directional Plan Report**



Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) Field:

NBU 1022-24B PAD Site:

NBU 1022-24B1AS Well:

Wellpath:

Date: 6/5/2008

Time: 07:22:57 Co-ordinate(NE) Reference:

Well: NBU 1022-24B1AS, Grid North

SITE 4911.0 Vertical (TVD) Reference: Section (VS) Reference:

Well (0.00N,0.00E,11.92Azi)

Minimum Curvature

Db: Sybase

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) Field:

Map System: Universal Transverse Mercator (USfeet)

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Map Zone:

UTM Zone 12, North 114W to 108W

Coordinate System: Geomagnetic Model:

Survey Calculation Method:

Well Centre bggm2007

Site:

Well:

NBU 1022-24B PAD

SECT 24-T10S-R22E

Site Position: From: Map Position Uncertainty:

Northing: 14507861.00 ft 2093446.00 ft Easting:

Latitude: Longitude:

39 56 19.672 N 1.878 W 109

North Reference: **Grid Convergence:**  Grid

4891.00 ft

0.00 ft

Slot Name:

1.04 deg

Well Position:

Wellpath:

Ground Level:

NBU 1022-24B1AS +N/-S

0.00 ft Northing: Easting: 0.00 ft

14507861.00 ft 2093446.00 ft Latitude: Longitude:

39 56 19.672 N 109 23 1.878 W

+E/-W**Position Uncertainty:** 

0.00 ft

Height 4911.00 ft

+N/-S

ft

0.00

Drilled From: Tie-on Depth: Surface 0.00 ft

**Current Datum:** Magnetic Data: Field Strength:

Vertical Section:

Depth From (TVD)

0.00

6/4/2008 52646 nT

**Above System Datum:** Declination: Mag Dip Angle:

Date Composed:

Mean Sea Level 11.43 deg 65.92 deg

+E/-W

Direction deg

ft 0.00

11.92 6/4/2008

Principal: Yes

Plan:

Version: Tied-to:

From Surface

**Plan Section Information** 

Plan #1

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	11.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1560.00	0.00	11.92	1560.00	0.00	0.00	0.00	0.00	0.00	0.00	
2433.70	26.21	11.92	2403.54	192.15	40.55	3.00	3.00	0.00	11.92	
3549.66	26.21	11.92	3404.75	674.42	142.34	0.00	0.00	0.00	0.00	
4598.09	0.00	11.92	4417.00	905.00	191.00	2.50	-2.50	0.00	180.00	DDUI 24D4AC
7881.09	0.00	11.92	7700.00	905.00	191.00	0.00	0.00	0.00	0.00	PBHL-24B1AS

#### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
1500.00	0.00	11.92	1500.00	0.00	0.00	0.00	0.00	14507861.00	2093446.00	9 5/8" CSG PT
1560.00	0.00	11.92	1560.00	0.00	0.00	0.00	0.00	14507861.00	2093446.00	KOP
1600.00	1.20	11.92	1600.00	0.41	0.09	0.42	3.00	14507861.41	2093446.09	
1700.00	4.20	11.92	1699.87	5.02	1.06	5.13	3.00	14507866.02	2093447.06	
1800.00	7.20	11.92	1799.37	14.74	3.11	15.06	3.00	14507875.74	2093449.11	
1900.00	10.20	11.92	1898.21	29.53	6.23	30.18	3.00	14507890.53	2093452.23	
2000.00	13.20	11.92	1996.12	49.37	10.42	50.46	3.00	14507910.37	2093456.42	
2100.00	16.20	11.92	2092.83	74.20	15.66	75.83	3.00	14507935.20	2093461.66	
2200.00	19.20	11.92	2188.09	103.94	21.94	106.23	3.00	14507964.94	2093467.94	
2300.00	22.20	11.92	2281.62	138.53	29.24	141.58	3.00	14507999.53	2093475.24	
2400.00	25.20	11.92	2373.18	177.85	37.54	181.77	3.00	14508038.85	2093483.54	
2433.70	26.21	11.92	2403.54	192.15	40.55	196.38	3.00	14508053.15	2093486.55	HOLD
2500.00	26.21	11.92	2463.03	220.80	46.60	225.67	0.00	14508081.80	2093492.60	
2600.00	26.21	11.92	2552.74	264.02	55.72	269.83	0.00	14508125.02	2093501.72	
2700.00	26.21	11.92	2642.46	307.23	64.84	314.00	0.00	14508168.23	2093510.84	
1										



# Weatherford Drilling Services **Directional Plan Report**



Company: Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 1022-24B PAD Field:

Site: NBU 1022-24B1AS Well:

Wellpath:

Date: 6/5/2008

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Section (VS) Reference: Survey Calculation Method:

Time: 07:22:57 Page: :: Well: NBU 1022-24B1AS, Grid North

SITE 4911.0

Well (0.00N,0.00E,11.92Azi)
Minimum Curvature **Db:** Sybase

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Commer
2800.00	26.21	11.92	2732.18	350.45	73.96	358.17	0.00	14508211.45	2093519.96	
2900.00	26.21	11.92	2821.90	393.67	83.08	402.34	0.00	14508254.67	2093529.08	
3000.00	26.21	11.92	2911.61	436.88	92.20	446.51	0.00	14508297.88	2093538.20	
3100.00	26.21	11.92	3001.33	480.10	101.32	490.67	0.00	14508341.10	2093547.32	
3200.00	26.21	11.92	3091.05	523.31	110.45	534.84	0.00	14508384.31	2093556.45	
						==0.04	0.00	4.4500.407.50	0000505 57	
3300.00	26.21	11.92	3180.77	566.53	119.57	579.01	0.00 0.00	14508427.53 14508470.74	2093565.57 2093574.69	
3400.00	26.21	11.92	3270.48	609.74	128.69	623.18			2093574.09	
3500.00	26.21	11.92	3360.20	652.96	137.81	667.34	0.00	14508513.96		DROP
3549.66	26.21	11.92	3404.75	674.42	142.34	689.28	0.00	14508535.42	2093588.34	DROP
3600.00	24.95	11.92	3450.16	695.69	146.82	711.01	2.50	14508556.69	2093592.82	
3675.37	23.07	11.92	3519.00	725.69	153.16	741.68	2.50	14508586.69	2093599.16	WASATCH
3700.00	22.45	11.92	3541.72	735.02	155.13	751.21	2.50	14508596.02	2093601.13	
3800.00	19.95	11.92	3634.94	770.40	162.59	787.37	2.50	14508631.40	2093608.59	
3900.00	17.45	11.92	3729.65	801.77	169.21	819.44	2.50	14508662.77	2093615.21	
4000.00	14.95	11.92	3825.67	829.07	174.98	847.34	2.50	14508690.07	2093620.98	
4400.00	40.45	44.00	2022.02	050.05	170 97	871.02	2.50	14508713.25	2093625.87	
4100.00	12.45	11.92	3922.82	852.25	179.87				2093629.81	TOP TARGET
4198.07	10.00	11.92	4019.00	870.93	183.81	890.11	2.50	14508731.93 14508732.26	2093629.88	IOF IARGET
4200.00	9.95	11.92	4020.90	871.26	183.88	890.45	2.50			
4300.00	7.45	11.92	4119.75	886.06	187.00	905.58	2.50	14508747.06	2093633.00	
4400.00	4.95	11.92	4219.15	896.63	189.23	916.38	2.50	14508757.63	2093635.23	
4500.00	2.45	11.92	4318.94	902.95	190.57	922.84	2.50	14508763.95	2093636.57	
4598.09	0.00	11.92	4417.00	905.00	191.00	924.94	2.50	14508766.00	2093637.00	HOLD
4600.00	0.00	11.92	4418.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
4700.00	0.00	11.92	4518.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
4800.00	0.00	11.92	4618.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
4900.00	0.00	11.92	4718.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5000.00	0.00	11.92	4818.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5100.00	0.00	11.92	4918.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5200.00	0.00	11.92	5018.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5300.00	0.00	11.92	5118.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5400.00	0.00	11.92	5218.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5500.00	0.00	11.92	5318.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5600.00	0.00	11.92	5418.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5700.00	0.00	11.92	5518.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
5800.00	0.00	11.92	5618.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
						0015:	0.00	4.500500.00	0000007.00	
5900.00	0.00	11.92	5718.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	MEGAVEDDE
5913.09	0.00	11.92	5732.00	905.00	191.00	924.94	0.00	14508766.00	2093637.00	MESAVERDE
6000.00	0.00	11.92	5818.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6100.00	0.00	11.92	5918.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6200.00	0.00	11.92	6018.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6300.00	0.00	11.92	6118.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6400.00	0.00	11.92	6218.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6500.00	0.00	11.92	6318.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6600.00	0.00	11.92	6418.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6700.00	0.00	11.92	6518.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6000.00	0.00	44.00	6619.04	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6800.00	0.00 0.00	11.92 11.92	6618.91 6718.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
6900.00		11.92	6818.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
7000.00	0.00		6918.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
7100.00 7200.00	0.00 0.00	11.92 11.92	7018.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
									000007.00	
7300.00	0.00	11.92	7118.91	905.00	191.00	924.94 924.94	0.00 0.00	14508766.00 14508766.00	2093637.00 2093637.00	
7400.00 7500.00	0.00 0.00	11.92 11.92	7218.91 7318.91	905.00 905.00	191.00 191.00	924.94	0.00	14508766.00	2093637.00	
		119/	7310.91	9U0.UU	191.00	344.34	0.00	1-1000100.00	2000001.00	



## Weatherford Drilling Services **Directional Plan Report**



Company: Anadarko-Kerr-McGee
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Site: NBU 1022-24B PAD

NBU 1022-24B1AS Well:

Wellpath: 1

Date: 6/5/2008

Co-ordinate(NE) Reference:

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Well: NBU 1022-24B1AS, Grid North

SITE 4911.0

Time: 07:22:57

Well (0.00N,0.00E,11.92Azi)

Db: Sybase Minimum Curvature

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Commen
7600.00	0.00	11.92	7418.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
7700.00	0.00	11.92	7518.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
7800.00	0.00	11.92	7618.91	905.00	191.00	924.94	0.00	14508766.00	2093637.00	
7881.09	0.00	11.92	7700.00	905.00	191.00	924.94	0.00	14508766.00	2093637.00	PBHL-24B1AS

T	a	r	g	e	ts

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
PBHL-24B1AS -Circle (Radiu -Plan hit targe			7700.00	905.00	191.00	14508766.002	093637.00	39 56 28.581 N	109 22 59.215 W

#### **Casing Points**

MD ft	TVD ft	Diameter in	Hole Size in	Name			 
1500.00	1500.00	9.625	12.250	9 5/8" CSG PT			

#### Annotation

MD ft	TVD ft			 
1560.00	1560.00	KOP		
2433.70	2403.54	HOLD		
3549.66	3404.75	DROP		
4198.07	4019.00	TOP TARGET		
4598.09	4417.00	HOLD		
7881.09	7700.00	PBHL-24B1AS		

#### **Formations**

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
483.00	483.00	GREEN RIVER		0.00	0.00
3675.37	3519.00	WASATCH		0.00	0.00
5913.09	5732.00	MESAVERDE		0.00	0.00





Company: Field:

Anadarko-Kerr-McGee

Date: 6/5/2008 UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Reference Site: Reference Well:

Reference Wellpath: 1

NBU 1022-24B PAD NBU 1022-24B1AS

Co-ordinate(NE) Reference:

Time: 08:32:28

Page:

Vertical (TVD) Reference:

Well: NBU 1022-24B1AS, Grid North SITE 4911.0

Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria Interval:

Interpolation Method: TVD Depth Range:

Yes

0.00 to 7881.09 ft Reference: Error Model: Plan: Plan #1 ISCWSA Ellipse Closest Approach 3D

Scan Method: Error Surface:

Ellipse

Plan: Plan #1

Maximum Radius: 10000.00 ft

Date Composed:

6/4/2008

Version: Tied-to:

From Surface

Principal: Summary

----- Offset Wellpath -----Reference Offset Ctr-Ctr Edge Separation MD MD Distance Distance Factor Warning Wellpath Site Well ft ft ft ft 2312.75 68.69 7.37 2319.89 79.47 NBU 1022-24B PAD NBU 1022-24B1DS 1 V0 Plan: Plan #1 V1 NBU 1022-24B PAD NBU 1022-24G1S 1 V0 Plan: Plan #1 V1 1700.13 1699.98 19.00 12.13 2.76

NBU 1022-24B PAD Site: NRU 1022-24B1DS Well: Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error:

0.00 ft

Offset Semi-Major Axis Offset Location Ctr-Ctr Edge Separation Reference TVD TFO-HS North Distance Distance Factor Warning TVD MD Ref Offset East MD ft ft ft ft ft ft ft ft ft deg 0.00 0.00 294.84 25.00 -54.00 59.51 No Data 0.00 0.00 0.00 0.00 -54.00 59.34 355.15 0.08 0.08 294.84 25.00 59.51 100.00 100.00 100.00 100.00 25.00 -54 00 59.51 58.92 101.47 0.29 294.84 200.00 200.00 200.00 200.00 0.29 300.00 0.50 0.50 294.84 25.00 -54.0059.51 58.50 59.19 300.00 300.00 300.00 -54.00 58.08 41.78 400.00 0.71 294.84 25.00 59.51 400.00 0.71 400.00 400.00 -54.00 32.29 500.00 500.00 500.00 500.00 0.92 0.92 294.84 25.00 59.51 57.66 1.13 294.84 25.00 -54.00 59.51 57.24 26.31 600.00 600.00 600.00 1.13 600.00 22.20 294.84 25.00 -54.00 59.51 56.83 700.00 700.00 1.34 1.34 700.00 700.00 294.84 -54.00 56.41 19.20 800.00 800.00 800.00 800.00 1.55 1.55 25.00 59.51 900.00 1.76 294.84 25.00 -54.00 59.51 55.99 16.91 900.00 900.00 900.00 1.76 55.57 15.11 25.00 -54.00 59.51 1000.00 1000.00 1000.00 1000.00 1.97 1.97 294.84 1100.00 1100.00 1100.00 2.18 2.18 294.84 25.00 -54.00 59.51 55.15 13.66 1100.00 294.84 25.00 -54.00 59.51 54.73 12.46 1200.00 1200.00 2.39 2.39 1200.00 1200 00 -54.00 59.51 54.31 11.46 294.84 25.00 1300.00 1300.00 1300.00 1300.00 2.60 2.60 1400.00 1400.00 1400.00 1400.00 2.81 2.81 294.84 25.00 -54.00 59.51 53.89 10.60 9.87 3.02 3.02 294.84 25.00 -54.00 59.51 53.47 1500.00 1500.00 1500.00 1500.00 9.24 1600.00 1600.00 1599.53 1599.53 3.23 3.22 282.90 25.41 -53.98 59.57 53.12 1698.37 3.44 3.43 282.66 30.01 -53.77 60.28 53.41 8.78 1700.13 1700.00 1698.49 282.16 -53.33 61.79 54.49 8.46 1797.20 3.66 3.65 39.77 1800.00 1797.81 1800.64 -52.65 56.35 8.25 1901.82 1900.00 1897.79 1896.03 3.90 3.89 281.44 54.76 64.12 -51.73 67.31 58.98 8.09 2003.99 2000.00 1998.70 1994.86 4.18 4.17 280.55 75.11 7.92 4.50 279.18 100.69 -50.57 71.24 62.25 2107.47 2100.00 2101.37 2094.27 4.53 7.64 -49.3574.93 65.12 2212.63 2200.00 2206.26 2195.60 4.95 4.88 274.31 127.78 2298.47 5.49 5.30 265.63 155.27 -48.10 79.47 68.69 7.37 2319.89 2300.00 2312.75 75.61 7.42 2402.99 6.13 5.75 254.11 183.21 -46.84 87.38 2400.00 2420.95 2429.75 87.39 7.89 2541.21 2500.00 2530.10 2508.44 6.89 6.22 242.78 211.39 -45.56100.07 239.58 6.71 234.18 -44.29 115.79 102.33 8.60 2600.00 2639.26 2613.89 7.68 2652.67 267.76 -43.01 133.48 119.29 9.41 2719.33 8.50 7 21 227.71 2764.13 2700.00 2748.42 152.45 137.56 10.24 -41.732875.60 2800.00 2857.58 2824.78 9.34 7.72 222.78 295.95 2930.23 8.23 218.95 324.13 -40.46 172.29 156.70 11.05 2987.06 2900.00 2966.73 10.21 -39.18192.72 176.43 11.83 352.32 3098.52 3000.00 3075.89 3035.68 11.08 8.76 215.92 -37.91 12.56 3141.13 9.29 213.47 380.50 213.58 196.58 3209.98 3100.00 3185.05 11.96 3246.58 12.86 9.82 211.45 408.68 -36.63 234.75 217.03 13.25 3321.44 3200 00 3294.21 10.16 209.68 434.17 -35.48 257.18 238.93 14.09 3346.63 13.76 3432.90 3300.00 3397.47 3444.81 14.66 10.26 207.79 455.55 -34.51 282.87 264.39 15.30 3544.36 3400.00 3497.96 10.33 205.75 16.81 15.23 473.13 -33.71 309.54 291.13 3500.00 3596.26 3541.52 3654.68







Company: Field:

Reference Site:

Anadarko-Kerr-McGee

Date: 6/5/2008

Time: 08:32:28

Well:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
NBU 1022-24B PAD
NBU 1022-24B1AS
Ver

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: NBU 1022-24B1AS, Grid North SITE 4911.0

Db: Sybase

Reference Well: Reference Wellpath: 1

NBU 1022-24B PAD NBU 1022-24B1DS Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error:

ft 0.00

Reference   MD	Wellpath:	1 V0 Plar	n: Plan #1 V	/1						Inter-Sit	e Error:	0.00	π
MID	Refe	erence	O	ffset	Semi-N	Iajor Axis	S	Offset I	ocation	Ctr-Ctr	Edge S	Separation	
ft													Warning
3988 85   3700.00   3795.81   3729.44   16.03   10.38   20.267   497.63   32.61   357.37   339.36   19.84   3990.00   3877.77   3821.10   16.36   10.37   201.47   500.53   32.27   378.68   360.92   21.32   4076.61   3900.00   3988.24   3911.46   16.68   10.32   200.41   509.44   32.07   398.34   390.87   22.79   4178.76   4000.00   4057.48   4000.88   16.86   10.24   199.48   511.00   32.00   416.43   399.28   24.28   4280.07   4100.00   4158.60   4100.00   17.02   10.30   198.64   511.00   32.00   441.78   414.59   25.12   4380.77   4200.00   4258.60   4200.00   17.12   10.41   198.07   511.00   32.00   442.93   425.78   26.31   4581.09   4400.00   4456.80   4400.00   17.14   10.65   197.59   511.00   32.00   449.88   432.78   26.31   4581.09   4400.00   4456.80   4400.00   17.25   10.90   20.95   511.00   32.00   452.73   433.68   23.77   4781.09   4600.00   4656.80   4600.00   17.25   10.90   20.95   511.00   32.00   452.73   433.68   23.77   4781.09   4600.00   4656.80   4600.00   17.25   10.90   20.95   511.00   32.00   452.73   433.15   23.12   4881.09   4700.00   4756.80   4800.00   17.39   11.16   20.95   511.00   32.00   452.73   433.15   23.12   4881.09   4900.00   4956.80   4900.00   17.39   11.16   20.95   511.00   32.00   452.73   432.59   22.80   5881.09   5000.00   5256.80   5000.00   17.62   11.56   20.95   511.00   32.00   452.73   432.59   22.48   5881.09   5200.00   5256.80   5300.00   17.62   11.56   20.95   511.00   32.00   452.73   432.12   21.75   5881.09   5000.00   5568.80   5300.00   17.76   11.70   20.95   511.00   32.00   452.73   432.13   21.75   5881.09   5000.00   5568.80   5400.00   17.78   11.48   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5500.00   5768.80   5400.00   17.78   11.48   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5000.00   5768.80   5600.00   18.04   12.28   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5000.00   5768.80   5600.00   18.04   12.28   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5000	i .		-						ft	ft	ft		
3988 85   3700.00   3795.81   3729.44   16.03   10.38   20.267   497.63   32.61   357.37   339.36   19.84   3990.00   3877.77   3821.10   16.36   10.37   201.47   500.53   32.27   378.68   360.92   21.32   4076.61   3900.00   3988.24   3911.46   16.68   10.32   200.41   509.44   32.07   398.34   390.87   22.79   4178.76   4000.00   4057.48   4000.88   16.86   10.24   199.48   511.00   32.00   416.43   399.28   24.28   4280.07   4100.00   4158.60   4100.00   17.02   10.30   198.64   511.00   32.00   441.78   414.59   25.12   4380.77   4200.00   4258.60   4200.00   17.12   10.41   198.07   511.00   32.00   442.93   425.78   26.31   4581.09   4400.00   4456.80   4400.00   17.14   10.65   197.59   511.00   32.00   449.88   432.78   26.31   4581.09   4400.00   4456.80   4400.00   17.25   10.90   20.95   511.00   32.00   452.73   433.68   23.77   4781.09   4600.00   4656.80   4600.00   17.25   10.90   20.95   511.00   32.00   452.73   433.68   23.77   4781.09   4600.00   4656.80   4600.00   17.25   10.90   20.95   511.00   32.00   452.73   433.15   23.12   4881.09   4700.00   4756.80   4800.00   17.39   11.16   20.95   511.00   32.00   452.73   433.15   23.12   4881.09   4900.00   4956.80   4900.00   17.39   11.16   20.95   511.00   32.00   452.73   432.59   22.80   5881.09   5000.00   5256.80   5000.00   17.62   11.56   20.95   511.00   32.00   452.73   432.59   22.48   5881.09   5200.00   5256.80   5300.00   17.62   11.56   20.95   511.00   32.00   452.73   432.12   21.75   5881.09   5000.00   5568.80   5300.00   17.76   11.70   20.95   511.00   32.00   452.73   432.13   21.75   5881.09   5000.00   5568.80   5400.00   17.78   11.48   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5500.00   5768.80   5400.00   17.78   11.48   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5000.00   5768.80   5600.00   18.04   12.28   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5000.00   5768.80   5600.00   18.04   12.28   20.95   511.00   32.00   452.73   431.13   20.96   5881.09   5000	3762 72	3600.00	3602 08	3636 31	15.65	10.37	204.08	487 07	-33.08	334.35	316 13	18.35	
19973.39   3900.00   3877.77   3821.10   16.36   10.37   201.47   505.03   32.27   378.68   360.92   21.32     4178.76   4000.00   4057.48   4000.68   16.68   10.32   200.41   500.94   32.07   388.34   380.72   22.79     4178.76   4000.00   4057.48   4000.68   16.68   10.24   199.48   511.00   32.00   416.43   399.28   24.28     428.07   4100.00   4156.80   4000.00   17.02   10.30   198.64   511.00   32.00   442.93   425.78   25.84     4481.04   4300.00   4356.80   4200.00   17.12   10.41   198.07   511.00   32.00   442.93   425.78   25.84     4481.04   4300.00   4456.80   4400.00   17.14   10.65   197.59   511.00   32.00   442.93   425.78   26.31     4581.09   4500.00   4556.80   4500.00   17.25   10.90   209.51   511.00   32.00   452.73   433.68   23.77     4781.09   4500.00   4556.80   4500.00   17.25   10.90   209.51   511.00   32.00   452.73   433.68   23.77     4781.09   4700.00   4756.80   4760.00   17.25   10.90   209.51   511.00   32.00   452.73   433.42   23.44     4881.09   4700.00   4756.80   4700.00   17.25   10.30   20.95   511.00   32.00   452.73   433.42   23.44     4881.09   4700.00   4756.80   4700.00   17.25   10.30   20.95   511.00   32.00   452.73   432.47   23.12     4981.09   4800.00   4856.80   4800.00   17.32   11.05   209.51   511.00   32.00   452.73   432.47   23.12     5781.09   5100.00   5156.80   5000.00   17.64   11.42   209.51   511.00   32.00   452.73   432.31   22.17     5781.09   5000.00   5356.80   5000.00   17.62   11.65   209.51   511.00   32.00   452.73   432.31   22.17     5881.09   5000.00   5356.80   5000.00   17.77   11.79   209.51   511.00   32.00   452.73   432.31   22.17     5881.09   5000.00   5356.80   5000.00   17.78   11.84   209.51   511.00   32.00   452.73   432.31   22.17     5881.09   5000.00   5356.80   5000.00   17.95   12.13   209.51   511.00   32.00   452.73   430.52   20.38     5881.09   5000.00   5356.80   5000.00   18.21   12.38   209.51   511.00   32.00   452.73   430.52   20.38     5881.09   5000.00   5356.80   5000.00   18.21   12.38   209.51   5										357.37	339 36		
4076.61 3900.00 3968.24 3911.46 16.64 10.32 200.41 509.44 -32.07 398.34 380.87 22.79  4178.76 4000.00 4057.48 4000.68 16.86 10.24 199.48 511.00 -32.00 416.43 399.28 24.28  4280.07 4100.00 4156.80 4100.00 17.02 10.30 198.64 511.00 -32.00 4317.8 414.59 25.12  4380.77 4200.00 4256.80 4200.00 17.12 10.41 198.07 511.00 -32.00 442.93 425.78 25.84  4481.04 4300.00 4356.80 4300.00 17.16 10.53 197.73 511.00 -32.00 449.8 437.8 25.81  4581.09 4400.00 4456.80 4400.00 17.14 10.65 197.59 511.00 -32.00 452.73 433.68 23.77  4781.09 4600.00 4556.80 4500.00 17.25 10.90 209.51 511.00 -32.00 452.73 433.68 23.77  4781.09 4600.00 4556.80 4600.00 17.25 10.90 209.51 511.00 -32.00 452.73 433.68 23.77  4881.09 4900.00 4756.80 4600.00 17.25 10.90 209.51 511.00 -32.00 452.73 433.42 23.44  4881.09 4700.00 4756.80 4600.00 17.39 11.16 209.51 511.00 -32.00 452.73 433.42 23.44  4881.09 4800.00 4856.80 4800.00 17.39 11.16 209.51 511.00 -32.00 452.73 433.42 23.44  4881.09 5000.00 5056.80 5000.00 17.39 11.16 209.51 511.00 -32.00 452.73 432.87 22.80  5081.09 5000.00 5056.80 5000.00 17.47 11.29 209.51 511.00 -32.00 452.73 432.87 22.80  5181.09 5000.00 5056.80 5000.00 17.62 11.56 209.51 511.00 -32.00 452.73 432.31 22.17  5281.09 5100.00 5156.80 5100.00 17.62 11.56 209.51 511.00 -32.00 452.73 432.31 22.17  5281.09 5100.00 5156.80 5100.00 17.62 11.56 209.51 511.00 -32.00 452.73 432.31 22.17  5281.09 5000.00 5256.80 5400.00 17.87 11.99 209.51 511.00 -32.00 452.73 432.31 22.16  5581.09 5000.00 5566.80 5000.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.13 20.96  5681.09 5000.00 5566.80 5000.00 17.87 11.99 209.51 511.00 -32.00 452.73 430.81 20.20 21.86  5681.09 5000.00 5566.80 5000.00 17.87 11.99 209.51 511.00 -32.00 452.73 430.51 20.38  5681.09 5000.00 5566.80 5000.00 18.04 12.22 12.62 209.51 511.00 -32.00 452.73 430.51 20.38  5681.09 5000.00 566.80 6000.00 18.04 12.22 12.62 209.51 511.00 -32.00 452.73 430.52 20.38  5681.09 6000.00 656.80 6000.00 18.24 12.43 209.51 511.00 -32.00 452.73 429.90 19.83  6681.09 6000.00 656.80 6000.00 18.21 12.52 209.51 511.													
4178.76 4000.00 4057.48 4000.88 16.86 10.24 199.48 511.00 -32.00 416.43 399.28 24.28 4280.07 4100.00 4156.80 4100.00 17.02 10.30 198.64 511.00 32.00 442.03 425.78 25.84 4481.04 4300.00 4356.80 420.00 17.12 10.41 198.07 511.00 32.00 44.98 432.78 25.84 4481.04 4300.00 4356.80 4400.00 17.14 10.65 197.59 511.00 32.00 449.88 432.78 26.31 4581.09 4400.00 4456.80 4400.00 17.14 10.65 197.59 511.00 32.00 452.73 433.68 23.77 4781.09 4500.00 4556.80 4500.00 17.25 10.90 299.51 511.00 -32.00 452.73 433.68 23.77 4781.09 4500.00 4556.80 4500.00 17.32 11.03 209.51 511.00 -32.00 452.73 433.68 23.77 4781.09 4500.00 4556.80 4500.00 17.32 11.03 209.51 511.00 -32.00 452.73 433.15 23.12 4881.09 4700.00 4758.80 4700.00 17.32 11.03 209.51 511.00 -32.00 452.73 433.15 23.12 4881.09 4900.00 4956.80 4900.00 17.34 11.16 299.51 511.00 -32.00 452.73 433.42 22.80 5881.09 4500.00 4956.80 4500.00 17.34 11.26 299.51 511.00 -32.00 452.73 433.15 23.12 4881.09 4900.00 4956.80 4500.00 17.34 11.62 299.51 511.00 -32.00 452.73 432.87 22.80 5881.09 500.00 5568.80 5000.00 17.64 11.42 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5100.00 5568.80 5000.00 17.64 11.42 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5100.00 5568.80 5000.00 17.76 11.76 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5000.00 5568.80 5000.00 17.78 11.84 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5000.00 5568.80 5000.00 17.78 11.84 209.51 511.00 -32.00 452.73 431.33 21.26 5381.09 500.00 5568.80 500.00 17.78 11.84 209.51 511.00 -32.00 452.73 431.33 21.26 5381.09 500.00 5568.80 500.00 17.78 11.79 209.51 511.00 -32.00 452.73 431.33 20.96 5581.09 500.00 5568.80 500.00 17.78 11.79 209.51 511.00 -32.00 452.73 431.33 21.26 5381.09 500.00 5568.80 500.00 18.04 12.28 209.51 511.00 -32.00 452.73 431.33 20.96 5581.09 500.00 5568.80 500.00 18.04 12.28 209.51 511.00 -32.00 452.73 430.82 20.38 5881.09 500.00 5568.80 500.00 18.24 12.28 209.51 511.00 -32.00 452.73 429.50 18.83 500.60 18.21 12.28 209.51 511.00 -32.00 452.73 429.50 18.83 500.60 18.21 12.28 209.51 511.00 -32.00 452.73 429													
4280.07         4100.00         4166.80         4100.00         17.02         10.30         198.64         511.00         -32.00         441.78         414.78         25.84           4881.04         4200.00         436.80         4300.00         17.16         10.53         197.73         511.00         -32.00         442.93         425.78         25.84           4881.09         4400.00         445.80         4400.00         17.14         10.65         197.59         511.00         -32.00         445.87         26.53           4681.09         4500.00         4556.80         4500.00         17.19         10.77         209.51         511.00         -32.00         452.73         433.42         23.77           4781.09         4600.00         456.80         4600.00         17.32         11.03         209.51         511.00         -32.00         452.73         433.45         23.72           4881.09         4900.00         456.80         4800.00         17.54         11.62         209.51         511.00         -32.00         452.73         432.67         22.80           581.09         5000.00         556.80         5000.00         17.54         11.42         209.51         511.00         -32.00	40/6.61	3900.00	3908.24	3911.40	10.04	10.32	200.41	508.44	-32.07	390.3	300.07	22.75	
4280.07         4100.00         4166.80         4100.00         17.02         10.30         198.64         511.00         -32.00         441.78         414.78         25.84           4881.04         4200.00         436.80         4300.00         17.16         10.53         197.73         511.00         -32.00         442.93         425.78         25.84           4881.09         4400.00         445.80         4400.00         17.14         10.65         197.59         511.00         -32.00         445.87         26.53           4681.09         4500.00         4556.80         4500.00         17.19         10.77         209.51         511.00         -32.00         452.73         433.42         23.77           4781.09         4600.00         456.80         4600.00         17.32         11.03         209.51         511.00         -32.00         452.73         433.45         23.72           4881.09         4900.00         456.80         4800.00         17.54         11.62         209.51         511.00         -32.00         452.73         432.67         22.80           581.09         5000.00         556.80         5000.00         17.54         11.42         209.51         511.00         -32.00	4179 76	4000 00	4057.48	⊿റ∩റ ഒള	16.86	10 24	199 48	511.00	-32 00	416 43	399.28	24.28	
4380.77   4200.00   4258.80   4200.00   17.12   10.41   198.07   511.00   -32.00   442.93   425.78   25.84     4481.04   4400.00   4456.80   4400.00   17.14   10.65   197.59   511.00   -32.00   442.83   425.78   25.81     4581.09   4600.00   4565.80   4500.00   17.14   10.65   197.59   511.00   -32.00   452.67   435.61   26.53     4681.09   4600.00   4565.80   4500.00   17.25   10.90   209.51   511.00   -32.00   452.73   433.48   23.77     4781.09   4600.00   4565.80   4700.00   17.25   11.03   209.51   511.00   -32.00   452.73   433.45   23.12     4881.09   4700.00   4756.80   4700.00   17.32   11.03   209.51   511.00   -32.00   452.73   433.45   23.12     4881.09   4800.00   4856.80   4800.00   17.47   11.12   208.51   511.00   -32.00   452.73   432.59   22.48     5181.09   5000.00   5056.80   5000.00   17.64   11.42   208.51   511.00   -32.00   452.73   432.59   22.48     5181.09   5000.00   5056.80   5000.00   17.62   11.56   209.51   511.00   -32.00   452.73   432.20   21.86     5381.09   5200.00   5256.80   5200.00   17.70   11.16   209.51   511.00   -32.00   452.73   431.13   21.56     5481.09   5400.00   5456.80   5400.00   17.87   11.84   209.51   511.00   -32.00   452.73   431.13   21.56     5581.09   5500.00   5556.80   5500.00   17.87   11.84   209.51   511.00   -32.00   452.73   431.43   21.26     5681.09   5500.00   5566.80   5600.00   18.04   12.28   209.51   511.00   -32.00   452.73   430.83   20.67     5781.09   5600.00   5956.80   5600.00   18.04   12.28   209.51   511.00   -32.00   452.73   430.83   20.67     5781.09   6600.00   6956.80   6600.00   18.31   12.43   209.51   511.00   -32.00   452.73   430.83   20.67     5781.09   6600.00   6956.80   6600.00   18.31   12.43   209.51   511.00   -32.00   452.73   429.59   19.83     6881.09   6700.00   5956.80   6700.00   18.31   12.43   209.51   511.00   -32.00   452.73   429.59   19.56     6881.09   6000.00   6956.80   6000.00   18.31   12.43   209.51   511.00   -32.00   452.73   429.69   19.59     6881.09   6000.00   6956.80   6000.00   18.31													
4481.04 4300.00 4366.80 4400.00 17.14 10.65 197.59 511.00 -32.00 449.88 432.78 26.31 4581.09 4400.00 4456.80 4400.00 17.14 10.65 197.59 511.00 -32.00 452.67 435.61 26.53 4881.09 4500.00 456.80 4500.00 17.25 10.99 209.51 511.00 -32.00 452.73 433.68 23.77 4781.09 4500.00 456.80 4500.00 17.32 11.03 209.51 511.00 -32.00 452.73 433.42 23.44 4881.09 4700.00 4756.80 4700.00 17.32 11.03 209.51 511.00 -32.00 452.73 433.45 23.12 4881.09 4800.00 4856.80 4800.00 17.39 11.16 209.51 511.00 -32.00 452.73 433.45 23.12 4881.09 4800.00 456.80 4800.00 17.47 11.29 209.51 511.00 -32.00 452.73 432.87 22.80 5081.09 5100.00 5156.80 5000.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.87 22.80 5181.09 5000.00 556.80 5000.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5100.00 526.80 5200.00 17.76 11.56 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5000.00 526.80 5200.00 17.78 11.82 209.51 511.00 -32.00 452.73 431.32 21.66 5381.09 5000.00 546.80 5400.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.43 21.56 5581.09 5400.00 546.80 5400.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.43 20.96 5581.09 5500.00 556.80 5500.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.43 20.96 5581.09 5500.00 556.80 5500.00 18.81 12.82 209.51 511.00 -32.00 452.73 431.32 20.96 5581.09 5500.00 556.80 5500.00 18.24 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 576.80 5700.00 18.21 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 586.80 5800.00 18.22 12.26 209.51 511.00 -32.00 452.73 430.21 20.10 5981.09 5800.00 586.80 5800.00 18.22 12.26 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 586.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 429.90 19.83 6881.09 5000.00 586.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 429.90 19.83 6881.09 5000.00 586.80 5800.00 18.21 12.80 20.91 511.00 -32.00 452.73 429.90 19.83 6881.09 5800.00 686.80 6800.00 18.21 12.80 20.91 511.00 -32.00 452.73 429.90 19.83 6881.09 6800.00 686.80 6800.00 18.21 12.80 20.91 511.00 -32.00 452.73 429.90 19.83 18.27 6881.09 6800.00 686.80													
4581.09									-32.00				
4681.09	1								-32.00				
4781.09 4800.00 4858.80 4500.00 17.25 10.90 209.51 511.00 -32.00 452.73 433.42 23.44 4881.09 4700.00 4756.80 4700.00 17.32 11.03 209.51 511.00 -32.00 452.73 433.15 23.12 4881.09 4800.00 4858.80 4800.00 17.39 11.6 209.51 511.00 -32.00 452.73 432.57 22.80 5081.09 4800.00 4858.80 500.00 17.47 11.29 209.51 511.00 -32.00 452.73 432.59 22.48 5181.09 5000.00 5156.80 5000.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.59 22.48 5281.09 5100.00 5156.80 5100.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.31 22.17 5281.09 5100.00 5156.80 5100.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.02 21.86 5381.09 5200.00 5256.80 5200.00 17.70 11.70 209.51 511.00 -32.00 452.73 432.02 21.86 5381.09 5200.00 5256.80 5200.00 17.70 11.70 209.51 511.00 -32.00 452.73 431.73 21.56 5481.09 5300.00 5356.80 5300.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.13 20.96 5581.09 5400.00 5456.80 5400.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.13 20.96 5681.09 5700.00 5756.80 5700.00 18.04 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 5756.80 5700.00 18.04 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 5756.80 5700.00 18.22 12.58 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5900.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 429.50 19.83 6081.09 5900.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 490.51 20.10 5881.09 500.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 429.50 19.83 6081.09 6000.00 6056.80 6000.00 18.21 12.88 209.51 511.00 -32.00 452.73 429.50 19.83 6081.09 6000.00 6056.80 6000.00 18.21 12.32 209.51 511.00 -32.00 452.73 429.50 19.50 6881.09 6000.00 656.80 6000.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.81 18.52 6581.09 6000.00 656.80 6000.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.81 18.77 6881.09 6000.00 656.80 6600.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09 6000.00 656.80 6600.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09 6000.00 656.80 6600.00 19.31 18.92 13.65 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09	1001.00	1100.00	1100.00										
4781.09 4800.00 4568.80 4600.00 17.25 10.90 209.51 511.00 -32.00 452.73 433.42 23.44 4881.09 4700.00 4736.80 4700.00 17.39 11.16 209.51 511.00 -32.00 452.73 433.15 23.12 4881.09 4800.00 4856.80 4800.00 17.39 11.16 209.51 511.00 -32.00 452.73 432.87 22.80 5081.09 4800.00 4856.80 5000.00 17.47 11.29 209.51 511.00 -32.00 452.73 432.59 22.48 5081.09 5100.00 5156.80 5000.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.59 22.48 5081.09 5100.00 5156.80 5100.00 17.54 11.42 209.51 511.00 -32.00 452.73 432.02 21.86 5381.09 5200.00 5256.80 5200.00 17.70 11.70 209.51 511.00 -32.00 452.73 432.02 21.86 5381.09 5300.00 5256.80 5200.00 17.78 11.84 209.51 511.00 -32.00 452.73 432.02 21.86 5881.09 5400.00 5456.80 5400.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.13 20.96 5681.09 5500.00 5556.80 5500.00 17.87 11.99 209.51 511.00 -32.00 452.73 431.13 20.96 5681.09 5500.00 5566.80 5600.00 18.04 12.28 209.51 511.00 -32.00 452.73 431.13 20.96 5681.09 5700.00 5756.80 5700.00 18.04 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 5756.80 5700.00 18.04 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5900.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5900.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 490.51 20.10 5881.09 5900.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 490.51 20.10 5881.09 500.00 5856.80 6800.00 18.22 12.58 209.51 511.00 -32.00 452.73 429.90 19.83 6881.09 600.00 6056.80 6000.00 18.21 12.73 209.51 511.00 -32.00 452.73 428.81 18.52 6581.09 6100.00 6156.80 6100.00 18.61 13.20 209.51 511.00 -32.00 452.73 428.81 18.77 6881.09 6200.00 6256.80 6200.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.81 18.77 6881.09 6300.00 6356.80 6300.00 18.11 13.36 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09 600.00 6566.80 6600.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09 600.00 6566.80 6600.00 18.92 13.65 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09 600.00 6566.80 6600.00 19.51 14.70 209.51 511.00 -32.00 452.73 428.61 18.77 6881.09 670	4681.09	4500.00	4556.80	4500.00	17.19	10.77	209.51	511.00	-32.00	452.73	433.68	23.77	
4881.09         4700.00         4756.80         4700.00         17.32         11.03         209.51         511.00         -32.00         452.73         432.87         22.80           5081.09         4900.00         4956.80         4900.00         17.47         11.29         209.51         511.00         -32.00         452.73         432.87         22.80           5181.09         5000.00         5056.80         5000.00         17.54         11.42         209.51         511.00         -32.00         452.73         432.31         22.17           5281.09         5100.00         5166.80         5100.00         17.62         11.56         209.51         511.00         -32.00         452.73         432.02         21.86           5381.09         5200.00         5266.80         5200.00         17.70         11.76         209.51         511.00         -32.00         452.73         431.73         21.56         5481.09         5300.00         5368.80         5300.00         17.81         11.84         209.51         511.00         -32.00         452.73         431.13         22.16         5581.00         5681.00         500.00         5666.80         5600.00         18.04         12.23         209.51         511.00										452.73	433.42	23.44	
4861.09								511.00	-32.00				
5081.09         4900.00         4956.80         4900.00         17.47         11.29         209.51         511.00         -32.00         452.73         432.59         22.48           5181.09         5000.00         5056.80         5000.00         17.54         11.42         209.51         511.00         -32.00         452.73         432.31         22.17           5281.09         5200.00         5256.80         5200.00         17.70         11.75         299.51         511.00         -32.00         452.73         431.73         21.56           5481.09         5300.00         5366.80         5300.00         17.87         11.84         209.51         511.00         -32.00         452.73         431.73         21.56           5881.09         5400.00         5456.80         5400.00         17.87         11.89         209.51         511.00         -32.00         452.73         431.43         21.66           5881.09         5500.00         5566.80         5600.00         18.04         12.23         209.51         511.00         -32.00         452.73         430.83         20.67           5881.09         5700.00         5756.80         5700.00         18.13         12.43         209.51         511.0					17.39	11.16	209.51	511.00	-32.00	452.73	432.87		
5181.09         5000.00         5056.80         5000.00         17.54         11.42         209.51         511.00         -32.00         452.73         432.31         22.17           5281.09         5100.00         5156.80         5100.00         17.62         11.56         209.51         511.00         -32.00         452.73         432.02         21.86           5381.09         5200.00         5366.80         5300.00         17.78         11.84         209.51         511.00         -32.00         452.73         431.32         21.86           5481.09         5300.00         5366.80         5300.00         17.78         11.89         209.51         511.00         -32.00         452.73         431.33         21.26           5581.09         5400.00         5456.80         5400.00         17.95         12.13         209.51         511.00         -32.00         452.73         430.83         20.67           5881.09         5500.00         5568.80         5600.00         18.04         12.28         209.51         511.00         -32.00         452.73         430.82         20.87           5881.09         5900.00         5856.80         5800.00         18.13         12.43         209.51         511.0				4900.00	17.47	11.29	209.51	511.00	-32.00	452.73	432.59	22.48	
\$281.09 \$100.00 \$158.80 \$100.00 \$17.82 \$11.56 \$209.51 \$511.00 \$-32.00 \$452.73 \$432.02 \$21.86 \$581.09 \$500.00 \$5256.80 \$500.00 \$17.78 \$11.84 \$209.51 \$511.00 \$-32.00 \$452.73 \$431.43 \$21.26 \$581.09 \$5400.00 \$5456.80 \$5400.00 \$17.78 \$11.84 \$209.51 \$511.00 \$-32.00 \$452.73 \$431.43 \$21.26 \$581.09 \$500.00 \$5456.80 \$5400.00 \$17.87 \$11.99 \$209.51 \$511.00 \$-32.00 \$452.73 \$431.43 \$21.26 \$581.09 \$500.00 \$5556.80 \$500.00 \$17.78 \$11.84 \$209.51 \$511.00 \$-32.00 \$452.73 \$431.43 \$20.96 \$581.09 \$500.00 \$5556.80 \$500.00 \$18.04 \$12.28 \$209.51 \$511.00 \$-32.00 \$452.73 \$430.52 \$20.38 \$581.09 \$5700.00 \$5756.80 \$700.00 \$18.04 \$12.28 \$209.51 \$511.00 \$-32.00 \$452.73 \$430.52 \$20.38 \$581.09 \$500.00 \$5856.80 \$600.00 \$18.04 \$12.28 \$209.51 \$511.00 \$-32.00 \$452.73 \$430.52 \$20.38 \$581.09 \$5700.00 \$5856.80 \$600.00 \$18.22 \$12.58 \$209.51 \$511.00 \$-32.00 \$452.73 \$430.52 \$20.38 \$6081.09 \$5900.00 \$5956.80 \$600.00 \$18.22 \$12.73 \$209.51 \$511.00 \$-32.00 \$452.73 \$429.90 \$19.83 \$6081.09 \$5900.00 \$656.80 \$600.00 \$18.22 \$12.73 \$209.51 \$511.00 \$-32.00 \$452.73 \$429.58 \$19.56 \$6181.09 \$600.00 \$6156.80 \$600.00 \$18.41 \$12.88 \$209.51 \$511.00 \$-32.00 \$452.73 \$429.58 \$19.56 \$6181.09 \$600.00 \$6156.80 \$6100.00 \$18.51 \$13.04 \$209.51 \$511.00 \$-32.00 \$452.73 \$428.94 \$19.03 \$6381.09 \$620.00 \$6256.80 \$6200.00 \$18.61 \$13.20 \$209.51 \$511.00 \$-32.00 \$452.73 \$428.94 \$19.03 \$6381.09 \$620.00 \$6256.80 \$6200.00 \$18.81 \$13.20 \$209.51 \$511.00 \$-32.00 \$452.73 \$428.84 \$18.52 \$6581.09 \$6400.00 \$6456.80 \$6400.00 \$18.82 \$13.52 \$209.51 \$511.00 \$-32.00 \$452.73 \$428.28 \$18.52 \$6581.09 \$600.00 \$656.80 \$600.00 \$18.92 \$13.68 \$209.51 \$511.00 \$-32.00 \$452.73 \$427.95 \$18.27 \$6881.09 \$600.00 \$656.80 \$600.00 \$19.03 \$13.84 \$209.51 \$511.00 \$-32.00 \$452.73 \$427.62 \$18.03 \$7081.09 \$690.00 \$6956.80 \$690.00 \$19.25 \$14.17 \$209.51 \$511.00 \$-32.00 \$452.73 \$427.62 \$18.03 \$7081.09 \$690.00 \$6956.80 \$690.00 \$19.25 \$14.67 \$209.51 \$511.00 \$-32.00 \$452.73 \$426.60 \$17.33 \$7081.09 \$690.00 \$6956.80 \$700.00 \$19.70 \$14.67 \$209.51 \$511.00 \$-32.00 \$452.73 \$426.60 \$17.33 \$7081.09 \$700.00 \$7566.80 \$700.00 \$19.70 \$14.67 \$209	1												
5381.09   5200.00   5256.80   5200.00   17.70   11.70   209.51   511.00   -32.00   452.73   431.73   21.56   5481.09   5300.00   5368.80   5300.00   17.87   11.84   209.51   511.00   -32.00   452.73   431.43   21.26   5581.09   5400.00   5456.80   5400.00   17.87   11.99   209.51   511.00   -32.00   452.73   431.43   21.26   5681.09   5500.00   5566.80   5500.00   17.95   12.13   209.51   511.00   -32.00   452.73   430.83   20.67   5781.09   5500.00   5766.80   5700.00   18.04   12.28   209.51   511.00   -32.00   452.73   430.52   20.38   5881.09   5700.00   5866.80   5800.00   18.13   12.43   209.51   511.00   -32.00   452.73   430.21   20.10   5981.09   5800.00   5866.80   5800.00   18.22   12.58   209.51   511.00   -32.00   452.73   429.58   19.58   6081.09   5900.00   5966.80   5900.00   18.32   12.73   209.51   511.00   -32.00   452.73   429.58   19.58   6181.09   6000.00   6166.80   6100.00   18.51   13.04   209.51   511.00   -32.00   452.73   428.94   19.03   6381.09   6200.00   6256.80   6200.00   18.61   13.20   209.51   511.00   -32.00   452.73   428.84   18.77   6481.09   6300.00   6366.80   6300.00   18.71   13.36   209.51   511.00   -32.00   452.73   428.28   18.52   6581.09   6400.00   6456.80   6400.00   18.82   13.52   209.51   511.00   -32.00   452.73   428.28   18.52   6581.09   6600.00   6666.80   6600.00   18.82   13.52   209.51   511.00   -32.00   452.73   427.82   18.27   6681.09   6700.00   6756.80   6600.00   19.03   13.84   209.51   511.00   -32.00   452.73   427.82   17.79   6881.09   6700.00   6756.80   6700.00   19.03   13.84   209.51   511.00   -32.00   452.73   426.00   17.33   7081.09   6900.00   6966.80   6700.00   19.47   14.50   209.51   511.00   -32.00   452.73   426.00   17.33   7081.09   6900.00   7266.80   7000.00   19.59   14.67   209.51   511.00   -32.00   452.73   425.92   16.88   7281.09   7100.00   7266.80   7200.00   19.59   14.67   209.51   511.00   -32.00   452.73   425.92   16.86   7281.09   7200.00   7266.80   7200.00   19.82   15.01   209.51   511.00   -32.00	5181.09	5000.00	5056.80	5000.00	17.54								
5481.09         5300.00         5356.80         5300.00         17.78         11.84         209.51         511.00         -32.00         452.73         431.43         21.26           5681.09         5400.00         5456.80         5400.00         17.87         11.99         209.51         511.00         -32.00         452.73         431.13         20.96           5881.09         5500.00         5566.80         5600.00         18.04         12.28         209.51         511.00         -32.00         452.73         430.83         20.67           5881.09         5700.00         5756.80         5700.00         18.13         12.43         209.51         511.00         -32.00         452.73         430.21         20.10           5881.09         5800.00         5866.80         5800.00         18.22         12.58         209.51         511.00         -32.00         452.73         429.90         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.96         19.29           6281.09         6100.00         6156.80         6000.00         18.61         13.04         209.51         511.0	5281.09	5100.00		5100.00					-32.00				
5581.09         5400.00         5458.00         5400.00         17.87         11.99         209.51         511.00         -32.00         452.73         431.13         20.96           5681.09         5500.00         5556.80         5500.00         18.04         12.28         209.51         511.00         -32.00         452.73         430.83         20.67           5781.09         5600.00         5656.80         5600.00         18.04         12.28         209.51         511.00         -32.00         452.73         430.52         20.38           5881.09         5700.00         5768.80         5700.00         18.13         12.43         209.51         511.00         -32.00         452.73         430.21         20.10           5981.09         5900.00         5856.80         5800.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.90         19.83           6081.09         5900.00         6056.80         6000.00         18.41         12.88         209.51         511.00         -32.00         452.73         429.26         19.29           6281.09         6100.00         6156.80         6100.00         18.61         13.04         209.51         511.0	5381.09	5200.00	5256.80		17.70								
5681.09 5500.00 5556.80 5500.00 17.95 12.13 209.51 511.00 -32.00 452.73 430.83 20.67 5781.09 5600.00 5656.80 5600.00 18.04 12.28 209.51 511.00 -32.00 452.73 430.52 20.38 5881.09 5700.00 5756.80 5700.00 18.13 12.43 209.51 511.00 -32.00 452.73 430.21 20.10 5981.09 5800.00 5856.80 5800.00 18.22 12.58 209.51 511.00 -32.00 452.73 429.90 19.83 6081.09 5900.00 5956.80 5900.00 18.32 12.73 209.51 511.00 -32.00 452.73 429.90 19.83 6081.09 6000.00 6056.80 6000.00 18.41 12.88 209.51 511.00 -32.00 452.73 429.58 19.56 6181.09 6100.00 6156.80 6100.00 18.51 13.04 209.51 511.00 -32.00 452.73 429.26 19.29 6281.09 6200.00 6256.80 6200.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.94 19.03 6381.09 6200.00 6256.80 6200.00 18.81 13.20 209.51 511.00 -32.00 452.73 428.81 18.77 6481.09 6300.00 6356.80 6300.00 18.71 13.36 209.51 511.00 -32.00 452.73 428.28 18.52 6581.09 6400.00 6456.80 6400.00 18.82 13.52 209.51 511.00 -32.00 452.73 427.95 18.27 6681.09 6500.00 6556.80 6500.00 18.82 13.52 209.51 511.00 -32.00 452.73 427.62 18.03 6781.09 6600.00 6656.80 6600.00 19.03 13.84 209.51 511.00 -32.00 452.73 427.62 18.03 6781.09 6600.00 6656.80 6600.00 19.03 13.84 209.51 511.00 -32.00 452.73 427.62 18.03 6781.09 6800.00 6856.80 6800.00 19.25 14.17 209.51 511.00 -32.00 452.73 426.60 17.33 7081.09 6900.00 6956.80 6900.00 19.36 14.33 209.51 511.00 -32.00 452.73 426.60 17.33 7081.09 7000.00 7056.80 7000.00 19.36 14.33 209.51 511.00 -32.00 452.73 425.20 16.88 7281.09 7100.00 7256.80 7200.00 19.36 14.67 209.51 511.00 -32.00 452.73 425.22 16.86 7281.09 7100.00 7256.80 7200.00 19.87 14.67 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7256.80 7200.00 19.87 14.67 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7256.80 7200.00 19.81 15.18 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7556.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7566.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.52 16.05 7581.09 7400.00 7656.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.52 16.05	5481.09		5356.80	5300.00		11.84	209.51						
5781.09         5600.00         5656.80         5600.00         18.04         12.28         29.51         511.00         -32.00         452.73         430.52         20.38           5881.09         5700.00         5856.80         5800.00         18.22         12.58         20.951         511.00         -32.00         452.73         429.90         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.95         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.58         19.56           6181.09         6000.00         6056.80         6000.00         18.51         13.04         209.51         511.00         -32.00         452.73         429.26         19.29           6281.09         6100.00         6156.80         6100.00         18.51         13.04         209.51         511.00         -32.00         452.73         428.94         19.03           6381.09         6200.00         6356.80         6300.00         18.71         13.36         209.51         511.00	5581.09	5400.00	5456.80	5400.00	17.87	11.99	209.51	511.00	-32.00	452.73	431.13	20.96	
5781.09         5600.00         5656.80         5600.00         18.04         12.28         29.51         511.00         -32.00         452.73         430.52         20.38           5881.09         5700.00         5856.80         5800.00         18.22         12.58         20.951         511.00         -32.00         452.73         429.90         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.95         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.58         19.56           6181.09         6000.00         6056.80         6000.00         18.51         13.04         209.51         511.00         -32.00         452.73         429.26         19.29           6281.09         6100.00         6156.80         6100.00         18.51         13.04         209.51         511.00         -32.00         452.73         428.94         19.03           6381.09         6200.00         6356.80         6300.00         18.71         13.36         209.51         511.00										450 50	400.00	00.07	
5881.09         5700.00         5756.80         5700.00         18.13         12.43         209.51         511.00         -32.00         452.73         430.21         20.10           5981.09         5800.00         5856.80         5800.00         18.22         12.58         209.51         511.00         -32.00         452.73         429.90         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.58         19.56           6181.09         6000.00         6056.80         6000.00         18.41         12.88         209.51         511.00         -32.00         452.73         429.26         19.29           6281.09         6100.00         6156.80         6100.00         18.61         13.04         209.51         511.00         -32.00         452.73         428.94         19.03           6381.09         6200.00         6356.80         6300.00         18.71         13.36         209.51         511.00         -32.00         452.73         428.28         18.52           6581.09         6500.00         6556.80         6500.00         18.92         13.68         209.51         511.0													
5981.09         5800.00         5856.80         5800.00         18.22         12.58         209.51         511.00         -32.00         452.73         429.90         19.83           6081.09         5900.00         5956.80         5900.00         18.32         12.73         209.51         511.00         -32.00         452.73         429.58         19.56           6181.09         6000.00         6056.80         6000.00         18.41         12.88         209.51         511.00         -32.00         452.73         429.26         19.29           6281.09         6100.00         6156.80         6100.00         18.51         13.04         209.51         511.00         -32.00         452.73         429.26         19.29           6281.09         6200.00         6256.80         6200.00         18.61         13.20         209.51         511.00         -32.00         452.73         428.94         19.03           6881.09         6300.00         6356.80         6300.00         18.71         13.36         209.51         511.00         -32.00         452.73         427.92         18.27           6881.09         6500.00         6566.80         6600.00         19.03         13.84         209.51         511.0									-32.00				
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6281.09 6100.00 6156.80 6100.00 18.51 13.04 209.51 511.00 -32.00 452.73 428.94 19.03 6381.09 6200.00 6256.80 6200.00 18.61 13.20 209.51 511.00 -32.00 452.73 428.61 18.77 6481.09 6300.00 6356.80 6300.00 18.71 13.36 209.51 511.00 -32.00 452.73 428.28 18.52 6581.09 6400.00 6456.80 6400.00 18.82 13.52 209.51 511.00 -32.00 452.73 427.95 18.27 6681.09 6500.00 6556.80 6500.00 19.03 13.84 209.51 511.00 -32.00 452.73 427.28 17.79 6881.09 6600.00 6656.80 6600.00 19.03 13.84 209.51 511.00 -32.00 452.73 427.28 17.79 6881.09 6800.00 6756.80 6700.00 19.14 14.00 209.51 511.00 -32.00 452.73 426.94 17.56 6981.09 6800.00 6856.80 6800.00 19.25 14.17 209.51 511.00 -32.00 452.73 426.60 17.33 7081.09 6900.00 6956.80 6900.00 19.36 14.33 209.51 511.00 -32.00 452.73 426.26 17.10 7181.09 7000.00 7056.80 7000.00 19.47 14.50 209.51 511.00 -32.00 452.73 425.57 16.67 7381.09 7000.00 7256.80 7200.00 19.70 14.84 209.51 511.00 -32.00 452.73 425.57 16.67 7381.09 7300.00 7356.80 7300.00 19.82 15.01 209.51 511.00 -32.00 452.73 424.87 16.25 7581.09 7400.00 7456.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.87 16.25 7681.09 7500.00 7566.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7566.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7656.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7656.80 7600.00 20.06 15.35 209.51 511.00 -32.00 452.73 423.81 15.65	0404.00	0000.00	0050.00	6000.00	40.44	12.00	200 54	E11 00	22.00	452.73	420.26	10.20	
6381.09 6200.00 6256.80 6200.00 18.61 13.20 209.51 511.00 -32.00 452.73 428.61 18.77 6481.09 6300.00 6356.80 6300.00 18.71 13.36 209.51 511.00 -32.00 452.73 428.28 18.52 6581.09 6400.00 6456.80 6400.00 18.82 13.52 209.51 511.00 -32.00 452.73 427.95 18.27 6681.09 6500.00 6556.80 6500.00 18.92 13.68 209.51 511.00 -32.00 452.73 427.62 18.03 6781.09 6600.00 6656.80 6600.00 19.03 13.84 209.51 511.00 -32.00 452.73 427.28 17.79 6881.09 6700.00 6756.80 6700.00 19.14 14.00 209.51 511.00 -32.00 452.73 426.94 17.56 6981.09 6800.00 6856.80 6800.00 19.25 14.17 209.51 511.00 -32.00 452.73 426.60 17.33 7081.09 6900.00 6956.80 6900.00 19.36 14.33 209.51 511.00 -32.00 452.73 426.26 17.10 7181.09 7000.00 7056.80 7000.00 19.47 14.50 209.51 511.00 -32.00 452.73 425.92 16.88 7281.09 7100.00 7256.80 7200.00 19.70 14.84 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7356.80 7300.00 19.82 15.01 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7456.80 7400.00 19.82 15.01 209.51 511.00 -32.00 452.73 424.87 16.25 7581.09 7400.00 7456.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7500.00 7556.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65													
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6581.09       6400.00       6456.80       6400.00       18.82       13.52       209.51       511.00       -32.00       452.73       427.95       18.27         6681.09       6500.00       6556.80       6500.00       18.92       13.68       209.51       511.00       -32.00       452.73       427.62       18.03         6781.09       6600.00       6656.80       6600.00       19.03       13.84       209.51       511.00       -32.00       452.73       427.28       17.79         6881.09       6700.00       6756.80       6700.00       19.14       14.00       209.51       511.00       -32.00       452.73       426.94       17.56         6981.09       6800.00       6856.80       6800.00       19.25       14.17       209.51       511.00       -32.00       452.73       426.60       17.33         7081.09       6900.00       6956.80       6900.00       19.36       14.33       209.51       511.00       -32.00       452.73       426.26       17.10         7181.09       7000.00       7056.80       7000.00       19.47       14.50       209.51       511.00       -32.00       452.73       425.92       16.88         7281.09       7100													
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6781.09 6600.00 6656.80 6600.00 19.03 13.84 209.51 511.00 -32.00 452.73 427.28 17.79 6881.09 6700.00 6756.80 6700.00 19.14 14.00 209.51 511.00 -32.00 452.73 426.94 17.56 6981.09 6800.00 6856.80 6800.00 19.25 14.17 209.51 511.00 -32.00 452.73 426.60 17.33 7081.09 6900.00 6956.80 6900.00 19.36 14.33 209.51 511.00 -32.00 452.73 426.26 17.10 7181.09 7000.00 7056.80 7000.00 19.47 14.50 209.51 511.00 -32.00 452.73 425.92 16.88 7281.09 7100.00 7156.80 7100.00 19.59 14.67 209.51 511.00 -32.00 452.73 425.57 16.67 7381.09 7200.00 7256.80 7200.00 19.70 14.84 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7356.80 7300.00 19.82 15.01 209.51 511.00 -32.00 452.73 425.22 16.46 7581.09 7400.00 7456.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.87 16.25 7581.09 7500.00 7556.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65	6681 00	6500 00	6556 80	6500.00	18 92	13.68	209 51	511.00	-32 00	452.73	427.62	18.03	
6881.09       6700.00       6756.80       6700.00       19.14       14.00       209.51       511.00       -32.00       452.73       426.94       17.56         6981.09       6800.00       6856.80       6800.00       19.25       14.17       209.51       511.00       -32.00       452.73       426.60       17.33         7081.09       6900.00       6956.80       6900.00       19.36       14.33       209.51       511.00       -32.00       452.73       426.26       17.10         7181.09       7000.00       7056.80       7000.00       19.47       14.50       209.51       511.00       -32.00       452.73       425.92       16.88         7281.09       7100.00       7156.80       7100.00       19.59       14.67       209.51       511.00       -32.00       452.73       425.92       16.88         7881.09       7200.00       7256.80       7200.00       19.70       14.84       209.51       511.00       -32.00       452.73       425.22       16.46         7481.09       7300.00       7356.80       7300.00       19.82       15.01       209.51       511.00       -32.00       452.73       424.87       16.25         7581.09       7500													
6981.09 6800.00 6856.80 6800.00 19.25 14.17 209.51 511.00 -32.00 452.73 426.60 17.33 7081.09 6900.00 6956.80 6900.00 19.36 14.33 209.51 511.00 -32.00 452.73 426.26 17.10 7181.09 7000.00 7056.80 7000.00 19.47 14.50 209.51 511.00 -32.00 452.73 425.92 16.88 7281.09 7100.00 7156.80 7100.00 19.59 14.67 209.51 511.00 -32.00 452.73 425.57 16.67 7381.09 7200.00 7256.80 7200.00 19.70 14.84 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7356.80 7300.00 19.82 15.01 209.51 511.00 -32.00 452.73 424.87 16.25 7581.09 7400.00 7456.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.52 16.05 7681.09 7500.00 7556.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65													
7081.09       6900.00       6956.80       6900.00       19.36       14.33       209.51       511.00       -32.00       452.73       426.26       17.10         7181.09       7000.00       7056.80       7000.00       19.47       14.50       209.51       511.00       -32.00       452.73       425.92       16.88         7281.09       7100.00       7156.80       7100.00       19.59       14.67       209.51       511.00       -32.00       452.73       425.92       16.88         7381.09       7200.00       7256.80       7200.00       19.70       14.84       209.51       511.00       -32.00       452.73       425.22       16.46         7481.09       7300.00       7356.80       7300.00       19.82       15.01       209.51       511.00       -32.00       452.73       424.87       16.25         7581.09       7400.00       7456.80       7400.00       19.94       15.18       209.51       511.00       -32.00       452.73       424.52       16.05         7681.09       7500.00       7556.80       7500.00       20.06       15.35       209.51       511.00       -32.00       452.73       424.16       15.85         7781.09       7600													
7181.09 7000.00 7056.80 7000.00 19.47 14.50 209.51 511.00 -32.00 452.73 425.92 16.88 7281.09 7100.00 7156.80 7100.00 19.59 14.67 209.51 511.00 -32.00 452.73 425.57 16.67 7381.09 7200.00 7256.80 7200.00 19.70 14.84 209.51 511.00 -32.00 452.73 425.22 16.46 7481.09 7300.00 7356.80 7300.00 19.82 15.01 209.51 511.00 -32.00 452.73 424.87 16.25 7581.09 7400.00 7456.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.52 16.05 7681.09 7500.00 7556.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85 7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65						14.33	209.51						
7281.09     7100.00     7156.80     7100.00     19.59     14.67     209.51     511.00     -32.00     452.73     425.57     16.67       7381.09     7200.00     7256.80     7200.00     19.70     14.84     209.51     511.00     -32.00     452.73     425.22     16.46       7481.09     7300.00     7356.80     7300.00     19.82     15.01     209.51     511.00     -32.00     452.73     424.87     16.25       7581.09     7400.00     7456.80     7400.00     19.94     15.18     209.51     511.00     -32.00     452.73     424.15     16.05       7681.09     7500.00     7556.80     7500.00     20.06     15.35     209.51     511.00     -32.00     452.73     424.16     15.85       7781.09     7600.00     7656.80     7600.00     20.19     15.53     209.51     511.00     -32.00     452.73     423.81     15.65	.551.55	5550.00	J. J										
7281.09     7100.00     7156.80     7100.00     19.59     14.67     209.51     511.00     -32.00     452.73     425.57     16.67       7381.09     7200.00     7256.80     7200.00     19.70     14.84     209.51     511.00     -32.00     452.73     425.22     16.46       7481.09     7300.00     7356.80     7300.00     19.82     15.01     209.51     511.00     -32.00     452.73     424.87     16.25       7581.09     7400.00     7456.80     7400.00     19.94     15.18     209.51     511.00     -32.00     452.73     424.15     16.05       7681.09     7500.00     7556.80     7500.00     20.06     15.35     209.51     511.00     -32.00     452.73     424.16     15.85       7781.09     7600.00     7656.80     7600.00     20.19     15.53     209.51     511.00     -32.00     452.73     423.81     15.65	7181.09	7000.00	7056.80	7000.00	19.47	14.50	209.51		-32.00	452.73	425.92	16.88	
7381.09     7200.00     7256.80     7200.00     19.70     14.84     209.51     511.00     -32.00     452.73     425.22     16.46       7481.09     7300.00     7356.80     7300.00     19.82     15.01     209.51     511.00     -32.00     452.73     424.87     16.25       7581.09     7400.00     7456.80     7400.00     19.94     15.18     209.51     511.00     -32.00     452.73     424.15     16.05       7681.09     7500.00     7556.80     7500.00     20.06     15.35     209.51     511.00     -32.00     452.73     424.16     15.85       7781.09     7600.00     7656.80     7600.00     20.19     15.53     209.51     511.00     -32.00     452.73     423.81     15.65						14.67	209.51	511.00					
7481.09     7300.00     7356.80     7300.00     19.82     15.01     209.51     511.00     -32.00     452.73     424.87     16.25       7581.09     7400.00     7456.80     7400.00     19.94     15.18     209.51     511.00     -32.00     452.73     424.52     16.05       7681.09     7500.00     7556.80     7500.00     20.06     15.35     209.51     511.00     -32.00     452.73     424.16     15.85       7781.09     7600.00     7656.80     7600.00     20.19     15.53     209.51     511.00     -32.00     452.73     423.81     15.65						14.84	209.51			452.73	425.22		
7581.09 7400.00 7456.80 7400.00 19.94 15.18 209.51 511.00 -32.00 452.73 424.52 16.05  7681.09 7500.00 7556.80 7500.00 20.06 15.35 209.51 511.00 -32.00 452.73 424.16 15.85  7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65	7481.09	7300.00	7356.80	7300.00	19.82								
7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65				7400.00	19.94	15.18	209.51	511.00	-32.00	452.73	424.52	16.05	
7781.09 7600.00 7656.80 7600.00 20.19 15.53 209.51 511.00 -32.00 452.73 423.81 15.65											404.40	45.55	
7881.09 7700.00 7756.80 7700.00 20.31 15.70 209.51 511.00 -32.00 452.73 423.45 15.46			7656.80										
	7881.09	7700.00	7756.80	7700.00	20.31	15.70	209.51	511.00	-32.00	452.73	423.45	15.46	

Well:

NBU 1022-24B PAD NBU 1022-24G1S

Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00

ft

Refe	rence	Of	fset	Semi-M	lajor Axis	š	Offset I	Location	Ctr-Ctr	Edge S	Separation	
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft	Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	291.25	7.00	-18.00	19.31			No Data
100.00	100.00	100.00	100.00	0.08	0.08	291.25	7.00	-18.00	19.31	19.15	115.27	
200.00	200.00	200.00	200.00	0.29	0.29	291.25	7.00	-18.00	19.31	18.73	32.93	





Company: Field:

Anadarko-Kerr-McGee Date
UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
NBU 1022-24B PAD Co-

Date: 6/5/2008

Time: 08:32:28

NBU 1022-24B1AS

Well: NBU 1022-24B1AS, Grid North

Reference Site: Reference Well: Reference Wellpath: 1 Co-ordinate(NE) Reference: Vertical (TVD) Reference:

SITE 4911.0

Db: Sybase

Well: NBU 1022-24G1S
Wellnath: 1 V0 Plan: Plan #1 V1

NBU 1022-24B PAD

Inter-Site Error:

W	ellpath:	1 V0 Plan	: Plan #1 V	1						Inter-Sit	e Error:	0.00	ft	
	Refe	rence	Of	fset	Semi-M	ajor Axis		Offset	Location			Separation		
ĺ	MD	TVD	MD	TVD	Ref	Offset	TFO-HS		East			e Factor	Warning	ŀ
1	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
:	300.00	300.00	300.00	300.00	0.50	0.50	291.25	7.00	-18.00	19.31	18.31	19.21		
	400.00	400.00	400.00	400.00	0.71		291.25	7.00	-18.00	19.31	17.89	13.56		
									40.00	40.04	47.47	40.40		
	500.00	500.00	500.00	500.00	0.92		291.25	7.00	-18.00	19.31	17.47	10.48		
	300.00	600.00	600.00	600.00	1.13		291.25 291.25	7.00 7.00	-18.00 -18.00	19.31 19.31	17.05 16.63	8.54 7.20		
	700.00 300.00	700.00 800.00	700.00 800.00	700.00 800.00	1.34 1.55		291.25	7.00	-18.00	19.31	16.21	6.23		
	900.00	900.00	900.00	900.00	1.76		291.25	7.00	-18.00	19.31	15.79	5.49		
`	300.00	000.00	000.00	000.00										
10	00.00	1000.00	1000.00	1000.00	1.97		291.25	7.00	-18.00	19.31	15.38	4.90		
	100.00	1100.00	1100.00	1100.00	2.18		291.25	7.00	-18.00	19.31	14.96	4.43		
	200.00	1200.00	1200.00	1200.00	2.39		291.25	7.00	-18.00	19.31	14.54	4.04		
	300.00	1300.00	1300.00	1300.00	2.60	2.60	291.25 291.25	7.00	-18.00 -18.00	19.31 19.31	14.12 13.70	3.72 3.44		
14	400.00	1400.00	1400.00	1400.00	2.81	2.01	291.20	7.00	-10.00	18.51	13.70	0.44		
1/	500.00	1500.00	1500.00	1500.00	3.02	3.02	291.25	7.00	-18.00	19.31	13.28	3.20		
	300.00	1600.00	1600.15	1600.15	3.23		276.93	6.58	-17.97	19.08	12.63	2.96		
	700.13	1700.00	1699.98	1699.86	3.44	3.44	248.64	1.88	-17.67	19.00	12.13	2.76		
18	300.64	1800.00	1797.95	1797.34	3.66		210.38	-7.77	-17.05	30.41	23.14	4.18		
19	901.82	1900.00	1892.85	1891.16	3.90	3.88	192.07	-21.87	-16.15	57.07	49.44	7.48		
	202.00	2000 00	1000 50	1000 12	4 40	4 40	184.31	-39.69	-15.01	95.62	87.64	11.98		
	003.99	2000.00 2100.00	1983.59 2070.92	1980.13 2064.88	4.18 4.53		180.39	-60.65	-13.67	144.43		17.32		
	107.47 212.63	2200.00	2159.79	2150.88	4.95		178.22	-83.02	-12.24	200.37		22.93		
	319.89	2300.00	2247.14	2235.41	5.49		176.97		-10.84	262.48		28.70		
	129.75	2400.00	2332.86	2318.36	6.13		176.16		-9.46	331.12	321.56	34.62		
	541.21	2500.00	2417.67	2400.42	6.89		175.77		-8.09	403.42		39.94		
	352.67	2600.00	2502.47	2482.48	7.68		175.50		-6.72	475.74		44.63 48.81		
	764.13	2700.00	2587.28 2672.08	2564.55 2646.61	8.50 9.34		175.31 175.16		-5.36 -3.99	548.05 620.37		52.53		
	375.60 987.06	2800.00 2900.00	2756.89	2728.67	10.21		175.10		-2.63	692.70		55.87		
2:	307.00	2900.00	2700.00	2120.01	10.21	7.20	170.0-1	200.02	2.00	0020				
30	098.52	3000.00	2841.69	2810.74	11.08	7.59	174.94	-254.67	-1.26	765.02		58.86		
32	209.98	3100.00	2926.50	2892.80	11.96		174.86		0.10	837.35		61.56		
	321.44	3200.00	3011.30	2974.86	12.86		174.79		1.47	909.67		64.01		
	432.90	3300.00	3096.11	3056.93	13.76		174.73		2.83	982.00		66.23 68.25		
38	544.36	3400.00	3180.91	3138.99	14.66	9.18	174.68	-340.00	4.20	1054.32 1	1030.00	00.25		
3(	554.68	3500.00	3266.37	3221.68	15.23	9.59	174.82	-361.57	5.58	1124.06 1	108.21	70.94		
	762.72	3600.00	3391.02	3342.67	15.65		174.90		7.49	1187.44 1		74.73		
	368.85	3700.00	3547.71	3496.36	16.03	9.96	174.98	-421.81	9.43	1241.28 1		78.90		
39	973.39	3800.00	3715.25	3662.27	16.36		175.07		10.91	1284.92 1		82.93		
4(	076.61	3900.00	3891.76	3838.21	16.64	9.99	175.20	-458.74	11.79	1318.02 1	302.86	86.92		
	4=0=0	4000.00	4050.00	4000.00	40.00	0.00	175 24	462.00	12.00	1340.53 1	225 04	91.02		
	178.76 280.07	4000.00 4100.00	4053.60 4153.60	4000.00 4100.00	16.86 17.02		175.34 175.43		12.00	1356.71 1		92.24		
	280.07 380.77	4100.00	4153.60	4200.00	17.02	10.05	175.43	-462.00	12.00	1368.40 1		92.84		
	481.04	4300.00	4353.60	4300.00	17.16	10.17	175.53	-462.00	12.00	1375.69 1		93.34		
	581.09	4400.00	4453.60	4400.00	17.14		175.54		12.00	1378.61 1		93.76		
										1070 05		04.00		
	381.09	4500.00	4553.60	4500.00	17.19	10.41	187.46	-462.00	12.00	1378.67 1		91.22		
	781.09	4600.00	4653.60	4600.00	17.25		187.46 187.46		12.00 12.00	1378.67 1 1378.67 1		89.33 87.50		
	381.09 981.09	4700.00 4800.00	4753.60 4853.60	4700.00 4800.00	17.32 17.39		187.46		12.00	1378.67 1		85.72		
	981.09 081.09	4800.00	4953.60	4900.00	17.39		187.46		12.00	1378.67 1		83.99		
Ü	551.08	-1000.00	+000.00	4000,00							<b></b> -			
5	181.09	5000.00	5053.60	5000.00	17.54	11.07	187.46	-462.00	12.00	1378.67 1		82.31		
	281.09	5100.00	5153.60	5100.00	17.62	11.21	187. <b>4</b> 6	-462.00	12.00	1378.67 1		80.68		
	381.09	5200.00	5253.60	5200.00	17.70		187.46		12.00	1378.67 1		79.10		
54	481.09	5300.00	5353.60	5300.00	17.78	11.49	187.46	-462.00	12.00	1378.67 1	300.89	77.56		





Company:

Anadarko-Kerr-McGee

Date: 6/5/2008

Time: 08:32:28

Field:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Reference Site: Reference Well:

Reference Wellpath: 1

NBU 1022-24B PAD NBU 1022-24B1AS

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: NBU 1022-24B1AS, Grid North SITE 4911.0

51.68

Db: Sybase

Site: Well:

7881.09

NBU 1022-24B PAD NBU 1022-24G1S

Wellpath:	1 V0 Plan	: Plan #1 V	1						Inter-Sit	e Error:	0.00	ft	
Refe	rence	Of	fset	Semi-M	ajor Axis			Location			Separation		
MD	TVD	MD	TVD	Ref	Offset		S North	East			e Factor	Warning	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
5581.09	5400.00	5453.60	5400.00	17.87	11.64	187.46	-462.00	12.00	1378.67 1	360.55	76.07		
5681.09	5500.00	5553.60	5500.00	17.95	11.78	187.46	-462.00	12.00	1378.67 1	360.20	74.63		
5781.09	5600.00	5653.60	5600.00	18.04	11.93	187.46	-462.00	12.00	1378.67 1	359.84	73.23		
5881.09	5700.00	5753.60	5700.00	18.13	12.08	187.46	-462.00	12.00	1378.67 1		71.87		
5981.09	5800.00	5853.60	5800.00	18.22	12.23	187.46	-462.00	12.00	1378.67 1	359.13	70.55		
6081.09	5900.00	5953.60	5900.00	18.32	12.39	187.46	-462.00	12.00	1378.67 1	358.77	69.27		
6181.09	6000.00	6053.60	6000.00	18.41	12.54	187.46	-462.00	12.00	1378.67 1	358.40	68.03		
6281.09	6100.00	6153.60	6100.00	18.51	12.70	187.46	-462.00	12.00	1378.67 1	358.04	66.83		
6381.09	6200.00	6253.60	6200.00	18.61	12.86	187.46	-462.00	12.00	1378.67 1	357.67	65.66		
6481.09	6300.00	6353.60	6300.00	18.71	13.02	187.46	-462.00	12.00	1378.67 1	357.30	64.53		
6581.09	6400.00	6453.60	6400.00	18.82	13.18	187.46	-462.00	12.00	1378.67 1	356.93	63.43		
6681.09	6500.00	6553.60	6500.00	18.92	13.34	187.46	-462.00	12.00	1378.67 1		62.36		
6781.09	6600.00	6653.60	6600.00	19.03	13.51	187.46	-462.00	12.00	1378.67 1		61.32		1
6881.09	6700.00	6753.60	6700.00	19.14			-462.00	12.00	1378.67 1		60.32		
6981.09	6800.00	6853.60	6800.00	19.25	13.84	187.46	-462.00	12.00	1378.67 1		59.34		
7081.09	6900.00	6953.60	6900.00	19.36	14.00	187.46	-462.00	12.00	1378.67 1	355.06	58.39		
7181.09	7000.00	7053.60	7000.00	19.47			-462.00	12.00	1378.67 1		57.47		
7281.09	7100.00	7153.60	7100.00	19.59			-462.00	12.00	1378.67 1		56.57		
7381.09	7200.00	7253.60	7200.00	19.70			-462.00	12.00	1378.67 1		55.70		
7481.09	7300.00	7353.60	7300.00	19.82	14.68	187.46		12.00	1378.67 1		54.85		
7581.09	7400.00	7453.60	7400.00	19.94	14.86	187.46	-462.00	12.00	1378.67 1	353.15	54.02		
7681.09	7500.00	7553.60	7500.00	20.06		187.46		12.00	1378.67 1		53.22		
7781.09	7600.00	7653.60	7600.00	20.19	15.21	187.46	-462.00	12.00	1378.67 1		52.44		

15.38 187.46 -462.00

12.00

1378.67 1351.99

20.31

7700.00

7753.60

7700.00





Company: Field:

Anadarko-Kerr-McGee

NBU 1022-24B1DS

Date:

Time: 08:34:57

Page:

Reference Site: Reference Well: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 1022-24B PAD

6/5/2008 Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: NBU 1022-24B1DS, Grid North

SITE 4911.0

Db: Sybase

Reference Wellpath: 1 Well:

NBU 1022-24B PAD

NBU 1022-24B1AS

Inter-Site Error:

n ft

.00	f
.00	I

Wellpath:	1 V0 Plan	: Plan #1 V	'1						Inter-Site E		0.00	
Refe	Reference Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge Separation		eparation		
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance D	istance	Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft	.,	
3655.43	3600.00	3636.57	3483.44	10.36	15.16	34.58	685.53	203.96	315.19 29	6.92	17.25	
3756.21	3700.00	3748.24	3586.49	10.38	15.60	32.98	727.58	212.83	340.77 32	2.70	18.86	
3856.62	3800.00	3861.42	3692.95	10.37	16.01	31.60	765.15	220.76	364.99 34	<b>‡</b> 7.15	20.46	
3956.78	3900.00	3976.22	3802.73	10.32	16.37	30.39	797.95	227.68	387.74 37	70.18	22.08	
0000.70	0000.00	00.0	*									
4056.80	4000.00	4092.71	3915.70	10.24	16.68	29.31	825.70	233.54	408.97 39	91.74	23.73	
4156.80	4100.00	4211.27	4032.01	10.30	16.92	30.85	848.13	238.27	427.25 40	9.98	24.74	
4256.80	4200.00	4331.96	4151.46	10.41	17.08	30.12	864.90	241.81	440.72 42	23.51	25.61	
4356.80	4300.00	4454.14	4273.14	10.53	17.15	29.68	875.58	244.07	449.23 43	32.08	26.20	
4456.80	4400.00	4577.15	4396.06	10.65	17.14	29.51	879.91	244.98	452.66 43	35.59	26.52	
					47.40	00.54	000.00	245.00	452.73 43	33 68	23.77	
4556.80	4500.00	4681.09	4500.00	10.77	17.19	29.51	00.088 880.00	245.00	452.73 43		23.44	
4656.80	4600.00	4781.09	4600.00	10.90 11.03	17.25 17.32	29.51 29.51	880.00	245.00	452.73 43		23.12	
4756.80	4700.00	4881.09	4700.00 4800.00	11.03	17.32	29.51	880.00	245.00	452.73 43		22.80	
4856.80	4800.00	4981.09	4900.00	11.10	17.39	29.51	880.00	245.00	452.73 43	32.59	22.48	
4956.80	4900.00	5081.09	4900.00	11.23	17.77	20.01	000.00	210.00				
5056.80	5000.00	5181.09	5000.00	11.42	17.54	29.51	880.00	245.00	452.73 43	32.31	22.17	
5156.80	5100.00	5281.09	5100.00	11.56	17.62	29.51	880.00	245.00	452.73 43	32.02	21.86	
5256.80	5200.00	5381.09	5200.00	11.70	17.70	29.51	880.00	245.00	452.73 43	31.73	21.56	
5356.80	5300.00	5481.09	5300.00	11.84	17.78	29.51	880.00	245.00	452.73 43	31.43	21.26	
5456.80	5400.00	5581.09	5400.00	11.99	17.87	29.51	880.00	245.00	452.73 43	31.13	20.96	
0400.00	0.00.00								_			
5556.80	5500.00	5681.09	5500.00	12.13	17.95	29.51	880.00	245.00	452.73 43	30.83	20.67	
5656.80	5600.00	5781.09	5600.00	12.28	18.04	29.51	00.088	245.00	452.73 43	30.52	20.39	
5756.80	5700.00	5881.09	5700.00	12.43	18.13	29.51	880.00	245.00	452.73 43		20.10 19.83	
5856.80	5800.00	5981.09	5800.00	12.58	18.22	29.51	880.00	245.00	452.73 42 452.73 42	29.90 20.58	19.56	
5956.80	5900.00	6081.09	5900.00	12.73	18.32	29.51	880.00	245.00	402.73 42	29.50	19.50	
		0.404.00	0000.00	40.00	18.41	29.51	880.00	245.00	452.73 42	29 26	19.29	
6056.80	6000.00	6181.09	6000.00 6100.00	12.88 13.04	18.51	29.51	880.00	245.00	452.73 42	28.94	19.03	
6156.80	6100.00	6281.09 6381.09	6200.00	13.04	18.61	29.51	880.00	245.00	452.73 42	28.61	18.77	
6256.80	6200.00 6300.00	6481.09	6300.00	13.36	18.71	29.51	880.00	245.00	452.73 42	28.28	18.52	
6356.80	6400.00	6581.09	6400.00	13.52	18.82	29.51	880.00	245.00	452.73 42		18.27	
6456.80	0400.00	0001.00	3-00.00	.0.02				-				
6556.80	6500.00	6681.09	6500.00	13.68	18.92	29.51	880.00	245.00	452.73 42	27.62	18.03	
6656.80	6600.00	6781.09	6600.00	13.84	19.03	29.51	880.00	245.00	452.73 42	27.28	17.79	
6756.80	6700.00	6881.09	6700.00	14.00	19.14	29.51	880.00	245.00	452.73 42	26.94	17.56	
6856.80	6800.00	6981.09	6800.00	14.17	19.25	29.51	880.00	245.00	452.73 42		17.33	
6956.80	6900.00	7081.09	6900.00	14.33	19.36	29.51	00.088	245.00	452.73 42	26.26	17.10	
							000.00	0.45.00	450.70 49	25.02	16 00	
7056.80	7000.00	7181.09	7000.00	14.50	19.47	29.51	880.00	245.00	452.73 42 452.73 42	20.9Z 25.57	16.88 16.67	
7156.80	7100.00	7281.09	7100.00	14.67	19.59	29.51	880.00	245.00	452.73 42	20.07 25.22	16.46	
7256.80	7200.00	7381.09	7200.00	14.84	19.70	29.51 29.51	880.00 880.00	245.00 245.00	452.73 42	24.87	16.25	
7356.80	7300.00	7481.09	7300.00	15.01	19.82	29.51	880.00	245.00	452.73 42		16.05	
7456.80	7400.00	7581.09	7400.00	15.18	19.94	29.01	300.00	240.00	702.70	_ 1.0_	, 0.00	
7550.00	7500.00	7681.09	7500.00	15.35	20.06	29.51	880.00	245.00	452.73 42	24.16	15.85	
7556.80 7656.80	7500.00 7600.00	7781.09	7600.00	15.53	20.19	29.51	880.00	245.00	452.73 4	23.81	15.65	
7756.80	7700.00		7700.00	15.70	20.31	29.51	880.00	245.00	452.73 42		15. <del>4</del> 6	
1130.00	1100.00	7001.00										

Well:

NBU 1022-24B PAD NBU 1022-24G1S

Wellpath: 1 V0 Plan: Plan #1 V1

ft 0.00 Inter-Site Error: Ctr-Ctr Edge Separation Semi-Major Axis Offset Location Offset Reference Offset TFO-HS North Warning Distance Distance Factor East TVD MD TVD Ref MD ft ft ft deg ft ft

ft ft ft 40.25 No Data 36.00 0.00 116.57 -18.00 0.00 0.00 0.00 0.00 0.00 40.08 240.22 0.08 116.57 -18.00 36.00 40.25 0.08 100.00 100.00 100.00 100.00 36.00 68.63 -18.00 40.25 0.29 116.57 200.00 200.00 200.00 0.29 200.00

### Anadarko<sup>®</sup>

## **Weatherford Drilling Services Anticollision Report**



ft

Company: Field:

Anadarko-Kerr-McGee

Date: 6/5/2008

Time: 08:34:57

Reference Site: Reference Well:

Reference Wellpath: 1

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 1022-24B PAD NBU 1022-24B1DS

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: NBU 1022-24B1DS, Grid North SITE 4911.0

Db: Sybase

NBU 1022-24B PAD

Well: NBU 1022-24G1S
Wellpath: 1 V0 Plan: Plan #1 V1 0.00 Inter-Site Error:

Reference MD TVD ft         Offset MD TVD ft         Semi-Major Axis Ref Offset ft         Offset TFO-HS North deg ft         Ctr-Ctr ft         Edge Distance Factor ft         Separation Distance ft           300.00 300.00 300.00 400.00 400.00 400.00 400.00 500.00 500.00 600.00 600.00 600.00 600.00 600.00 600.00         0.50 0.50 0.50 116.57 -18.00	Warning
ft         ft<	
300.00 300.00 300.00 300.00 0.50 0.50 116.57 -18.00 36.00 40.25 39.24 40.04 400.00 400.00 400.00 0.71 0.71 116.57 -18.00 36.00 40.25 38.83 28.26 500.00 500.00 500.00 500.00 0.92 0.92 116.57 -18.00 36.00 40.25 38.41 21.84 600.00 600.00 600.00 600.00 1.13 1.13 116.57 -18.00 36.00 40.25 37.99 17.79	
300.00 30	
500.00 500.00 500.00 500.00 0.92 0.92 116.57 -18.00 36.00 40.25 38.41 21.84 600.00 600.00 600.00 600.00 1.13 1.13 116.57 -18.00 36.00 40.25 37.99 17.79	
600.00 600.00 600.00 600.00 1.13 1.13 116.57 -18.00 36.00 40.25 37.99 17.79	
600.00 600.00 600.00 600.00 1.13 1.13 116.57 -18.00 36.00 40.25 37.99 17.79	
100,00 30,00 40,4 40,67 40,00 36,00 40,25 37,57 15,01	
700.00 700.00 700.00 1.04 1.05 140.00 26.00 40.25 37.15 12.98	
800.00 800.00 800.00 800.00 1.33 1.30 1.40 57 40.00 20.00 40.25 36.73 11.44	
900.00 900.00 900.00 900.00 1.76 1.76 116.57 -18.00 36.00 40.25 36.73	
1000.00 1000.00 1000.00 1000.00 1.97 1.97 116.57 -18.00 36.00 40.25 36.31 10.22	
1000.00 1000.00 1000.00 1000.00 1000.00 10	ļ
1100.00 1100.00 1100.00 1100.00 2.18 2.18 116.57 -18.00 36.00 40.25 35.67 3.24 1200.00 1200.00 1200.00 2.39 2.39 116.57 -18.00 36.00 40.25 35.47 8.43	
1200.00 1200.00 1200.00 1200.00 1200.00 1200.00 1200.00 1300.0	
1300.00 1300.00 1300.00 1300.00 20 20 20 20 20 20 20 20 20 20 20 20 2	
1400.00 1400.00 1400.00 1400.00 2.81 2.81 116.57 -18.00 36.00 40.23 34.04	
1500.00 1500.00 1500.00 1500.00 3.02 3.02 116.57 -18.00 36.00 40.25 34.22 6.67	
1600 00 1600 00 1599 56 1599 56 3.23 3.22 115.00 -18.41 36.03 40.63 34.19 6.30	
1700 13 1700 00 1697.92 1697.80 3.44 3.43 125.08 -22.97 36.32 45.79 38.93 6.67	
1800 64 1800 00 1794 46 1793.87 3.66 3.64 139.34 -32.34 36.92 60.03 52.77 8.27	
1901.82 1900.00 1887.96 1886.35 3.90 3.87 150.76 -46.03 37.79 85.82 78.19 11.24	:
1501152	
2003.99 2000.00 1977.38 1974.07 4.18 4.11 158.12 -63.33 38.90 123.11 115.12 15.41	
2107 30 2100 00 2063 31 2057.52 4.52 4.37 162.89 -83.73 40.20 170.47 162.11 20.39	
2210.82 2200.00 2153.37 2144.67 4.90 4.68 166.06 -106.40 41.65 220.63 211.82 25.05	
2314 33 2300 00 2243 42 2231.81 5.31 5.02 168.07 -129.07 43.10 271.12 261.85 29.27	
2417.85 2400.00 2333.48 2318.96 5.74 5.37 169.45 -151.74 44.55 321.78 312.05 33.08	
2521.37 2500.00 2423.54 2406.10 6.18 5.74 170.45 -174.41 46.00 372.55 362.35 36.53	
2624.89 2600.00 2515.60 2495.25 0.04 0.12 171.22 10.04 474.00 402.40 42.50	
2/28.40 2/00.00 2003.00 2000.40 7.12 0.31 17.02 2.00 40 50.00 50.547 543.53 45.00	
2831.92 2800.00 2093.71 2007.34 7.30 0.31 77.23 205.00 54.04 576.44 562.07 47.46	
2935.44 2900.00 2783.77 2754.69 8.09 7.32 172.70 -265.09 51.81 576.11 563.97 47.46	
2020 06 2000 00 2873 83 2841 83 8 58 7.74 173.03 -287.76 53.26 627.06 614.42 49.63	
3036.90 3000.00 2073.00 2071.00 0.00 0.45 470.00 240.40 54.71 678.00 664.80 51.63	
3142.47 3100.00 2903.09 2920.90 9.00 0.10 170.50 000.40 50.46 720.00 715.27 53.47	
3243.99 3200.00 0000.30 0010.10 0.00 470.04 0.00 70 76 76 60 55 30	
3349.45 3300.00 3144.06 3103.33 10.02 3.00 174.00 070.05 50.07 937.65 913.35 57.88	
3452.19 3400.00 3234.93 3191.26 10.22 9.44 174.09 -378.65 59.07 827.65 813.35 57.66	
3554.13 3500.00 3339.25 3292.28 10.30 9.79 174.31 -404.63 60.73 871.73 857.42 60.95	
3554.13 3500.00 3339.25 3292.26 10.30 3.73 174.51 10.007 00.01 000.02 004.04 64.85	
3000.43 3000.00 3475.93 3425.77 10.00 171.05 177.74 04.43 027.05 024.27 68.55	
3/56.21 3/00.00 5016.37 5500.17 10.03 17.10	
3856.62 3800.00 3765.25 3712.02 10.37 10.03 174.74 -474.93 05.23 350.30 345.27 72.10 3956.78 3900.00 3915.16 3861.58 10.32 9.97 174.80 -484.76 65.86 970.56 957.70 75.52	
3000.70	
4056.80 4000.00 4053.60 4000.00 10.24 9.88 174.82 -487.00 66.00 973.99 961.55 78.31	
4156.80 4100.00 4153.60 4100.00 10.30 9.94 177.41 -487.00 66.00 973.99 961.40 77.36	
4256.80 4200.00 4253.60 4200.00 10.41 10.05 177.41 -487.00 66.00 973.99 961.04 75.21	
4366.80 4300.00 4353.60 4300.00 10.53 10.17 177.41 -487.00 66.00 973.99 960.68 73.16	
4350.80 4400.00 4453.60 4400.00 10.65 10.29 177.41 -487.00 66.00 973.99 960.32 71.21	
20.24	
4556.80 4500.00 4553.60 4500.00 10.77 10.41 177.41 -487.00 66.00 973.99 959.95 69.34	
4656.80 4600.00 4653.60 4600.00 10.90 10.54 177.41 -487.00 66.00 973.99 959.58 67.55	
4756.80 4700.00 4753.60 4700.00 11.03 10.67 177.41 -487.00 66.00 973.99 959.20 65.04	
4856.80 4800.00 4655.00 4600.00 11.10 10.00 17.41 107.00 000 000 000 000 000 000 000 000 00	
4956.80 4900.00 4953.60 4900.00 11.29 10.93 177.41 -487.00 66.00 973.99 958.45 62.64	
5056.80 5000.00 5053.60 5000.00 11.52 11.01 17.71 19.700 66.00 973.00 957.68 59.71	
1 5150.60 5100.00 5150.00 5150.00 14.70 44.05 477.44 497.00 66.00 973.00 957.30 58.34	
5256.80 5200.00 5253.60 5200.00 11.70 11.00 17.41 497.00 66.00 973.00 956.91 57.02	
5356.80 5300.00 5353.60 5300.00 11.84 11.49 177.41 -487.00 66.00 973.99 956.91 57.02	







Company: Field:

Anadarko-Kerr-McGee

Date: 6/5/2008 UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Time: 08:34:57

Page:

Reference Site: Reference Well:

Reference Wellpath: 1

NBU 1022-24B PAD NBU 1022-24B1DS

Well: NBU 1022-24B1DS, Grid North SITE 4911.0

Db: Sybase

NBU 1022-24B PAD NBU 1022-24G1S

Well: Wellpath:	1 V0 Plan	2-24618 i: Plan #1 V	'1						Inter-Sit	e Error:	0.00	ft
Refe	rence	Of	Tset	Semi-M	ajor Axis		Offset L				Separation	
MD	TVD	MD	TVD	Ref	Offset	TFO-H		East			e Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
5456.80	5400.00	5453.60	5400.00	11.99	11.64	177.41	-487.00	66.00	973.99	956.52	55.75	
5556.80	5500.00	5553.60	5500.00	12.13	11.78	177.41	-487.00	66.00	973.99		54.54	
5656.80	5600.00	5653.60	5600.00	12.28	11.93	177.41	-487.00	66.00		955.75	53.37	
5756.80	5700.00	5753.60	5700.00	12.43	12.08	177.41	-487.00	66.00	973.99		52.25	
5856.80	5800.00	5853.60	5800.00	12.58	12.23	177.41	-487.00	66.00	973.99		51.17	
5956.80	5900.00	5953.60	5900.00	12.73	12.39	177.41	-487.00	66.00	973.99	954.57	50.14	
6056.80	6000.00	6053.60	6000.00	12.88	12.54	177.41	-487.00	66.00	973.99		49.14	
6156.80	6100.00	6153,60	6100.00	13.04	12.70	177.41	-487.00	66.00	973.99		48.18	
6256.80	6200.00	6253.60	6200.00	13.20	12.86	177.41	-487.00	66.00	973.99		47.25	
6356.80	6300.00	6353.60	6300.00	13.36	13.02	177.41	-487.00	66.00	973.99		46.36	
6456.80	6400.00	6453.60	6400.00	13.52	13.18	177.41	-487.00	66.00	973.99	952.58	45.49	
6556,80	6500.00	6553.60	6500.00	13.68	13.34	177.41	-487.00	66.00	973.99		44.66	
6656.80	6600.00	6653.60	6600.00	13.84	13.51	177.41	-487.00	66.00	973.99		43.86	
6756.80	6700.00	6753,60	6700.00	14.00	13.67	177.41	-487.00	66.00		951.39	43.08	
6856.80	6800.00	6853.60	6800.00	14.17	13.84	177.41	-487.00	66.00		950.98	42.33	
6956.80	6900.00	6953.60	6900.00	14.33	14.00	177.41	-487.00	66.00	973.99	950.58	41.60	
7056.80	7000.00	7053.60	7000.00	14.50	14.17	177.41	-487.00	66.00	973.99		40.90	
7156.80	7100.00	7153.60	7100.00	14.67	14.34	177.41	-487.00	66.00	•	949.78	40.22	
7256.80	7200.00	7253.60	7200.00	14.84	14.51	177.41	-487.00	66.00	973.99		39.56	
7356.80	7300.00	7353.60	7300.00	15.01	14.68	177.41	-487.00	66.00	•	948.97	38.92	
7456.80	7400.00	7453.60	7400.00	15.18	14.86	177.41	-487.00	66.00	973.99	948.56	38.30	
7556.80	7500.00	7553.60	7500.00	15.35	15.03	177.41		66.00	973.99		37.70	
7656.80	7600.00	7653.60	7600.00	15.53	15.21	177.41		66.00	973.99		37.12	
7756.80	7700.00	7753.60	7700.00	15.70	15.38	177.41	<del>-4</del> 87.00	66.00	973.99	947.35	36.55	

### Kerr-McGee Oil & Gas Onshore LP NBU #1022-24B, #1022-24B1DS, #1022-24G1S & #1022-24B1AS SECTION 24, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 2.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST: TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 4.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY1.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 2.3 MILES TO THE EXISTING #2D-36 AND THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 2.3 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 67.8 MILES.

## Kerr-McGee Oil & Gas Onshore LP

NBU #1022-24B, #1022-24B1DS, #1022-24G1S & #1022-24B1AS LOCATED IN UINTAH COUNTY, UTAH SECTION 24, T10S, R22E, S.L.B.&M.

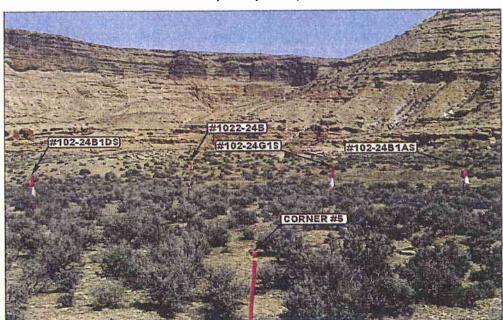


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

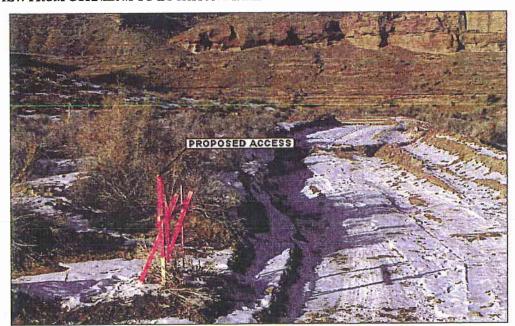


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



Uintah Engineering & Land Surveying 385 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

02 05 04 MONTH DAY YEAR

PHOTO

TAKEN BY: D.K. | DRAWN BY: P.M. | REV: 05-06-08 Z.L.

Kerr-McGee Oil & Gas Onshore LP NBU #1022-24B, #1022-24B1DS, #1022-24G1S & #1022-24B1AS PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH SECTION 24, T10S, R22E, S.L.B.&M.

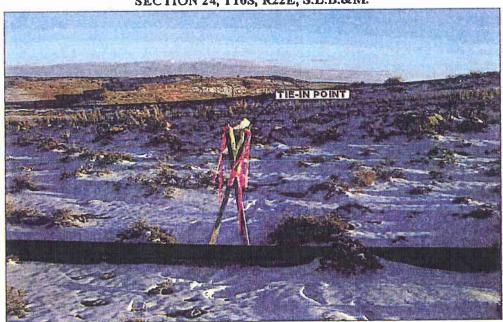


PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: SOUTHEASTERLY

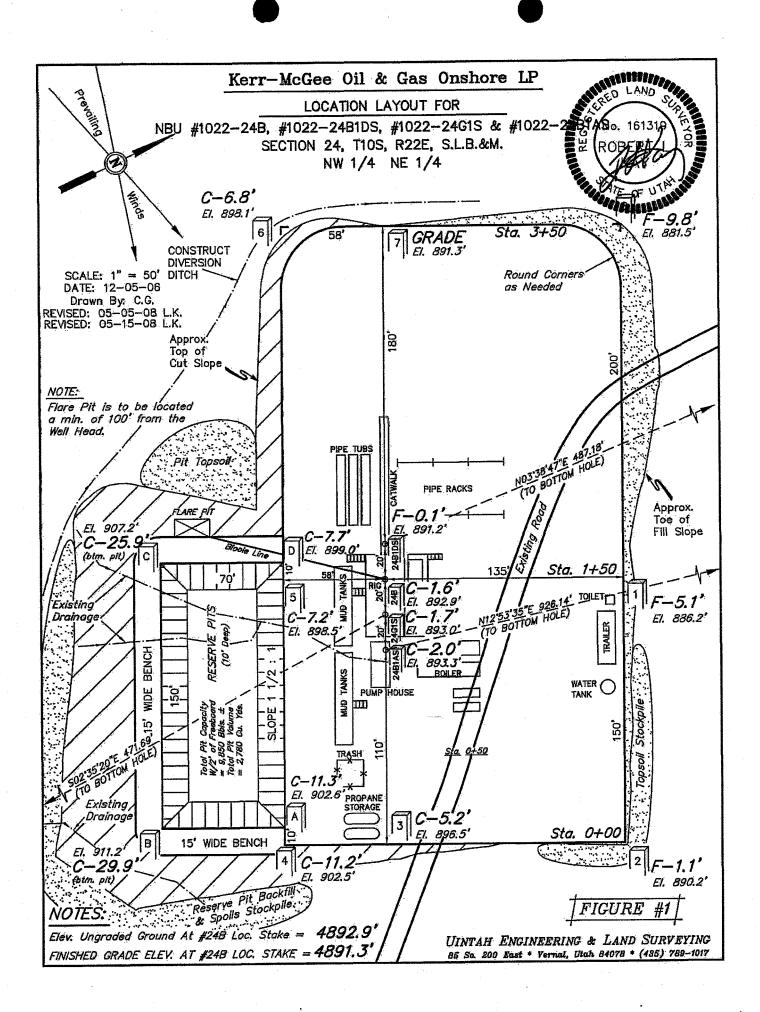


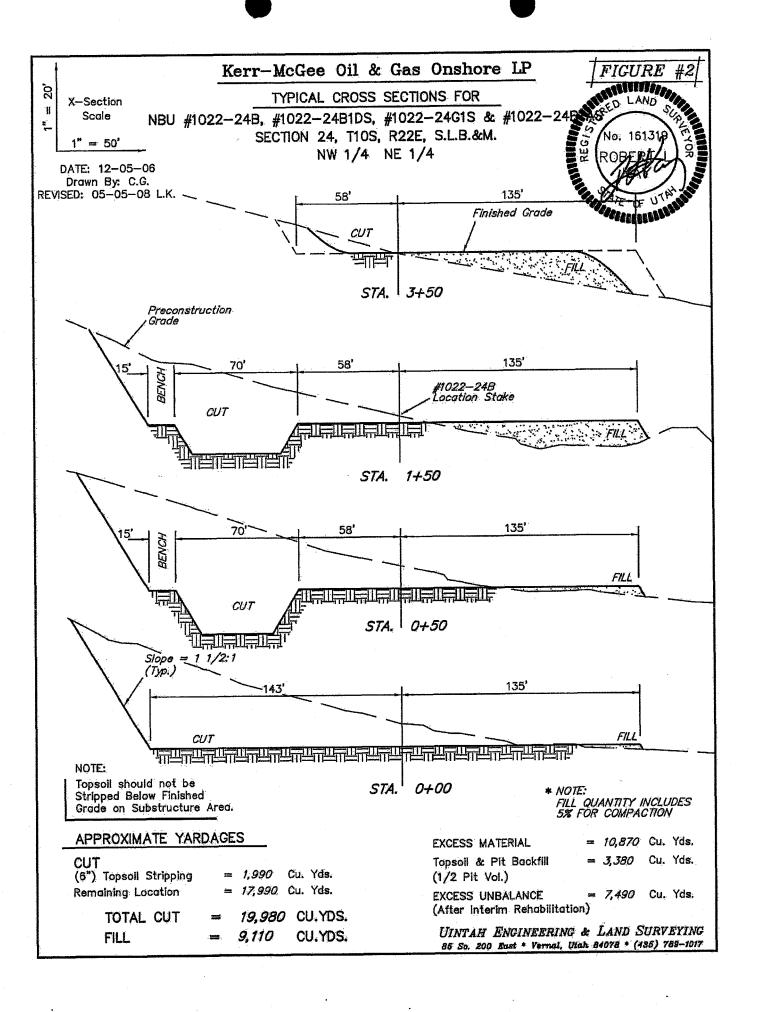
PHOTO: VIEW OF PIPELINE ALIGNMENT

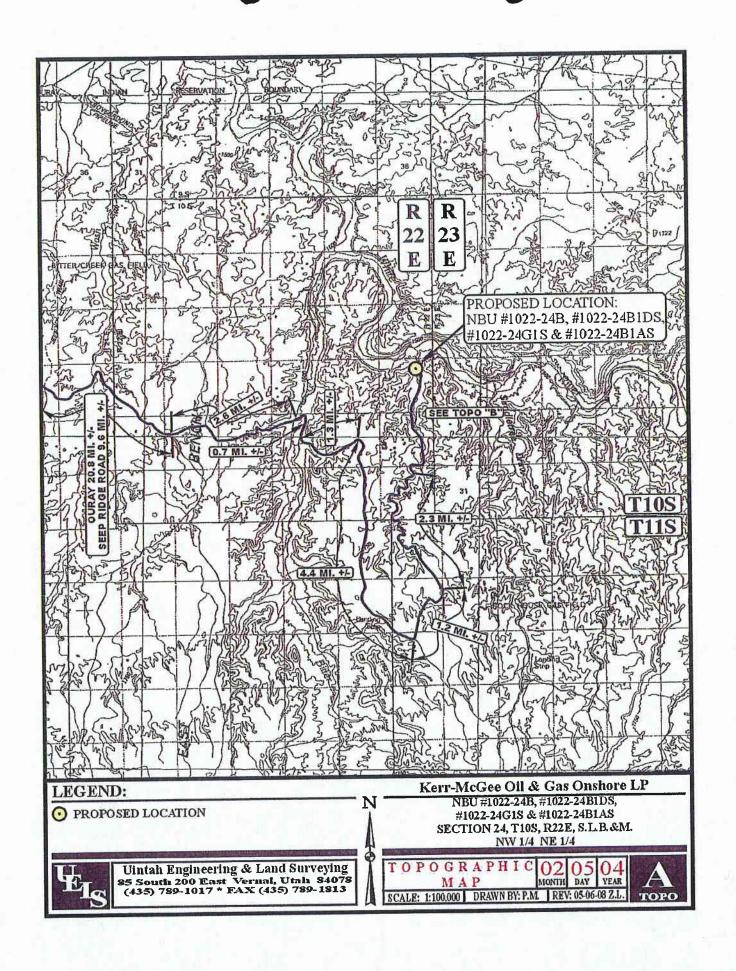
CAMERA ANGLE: WESTERLY

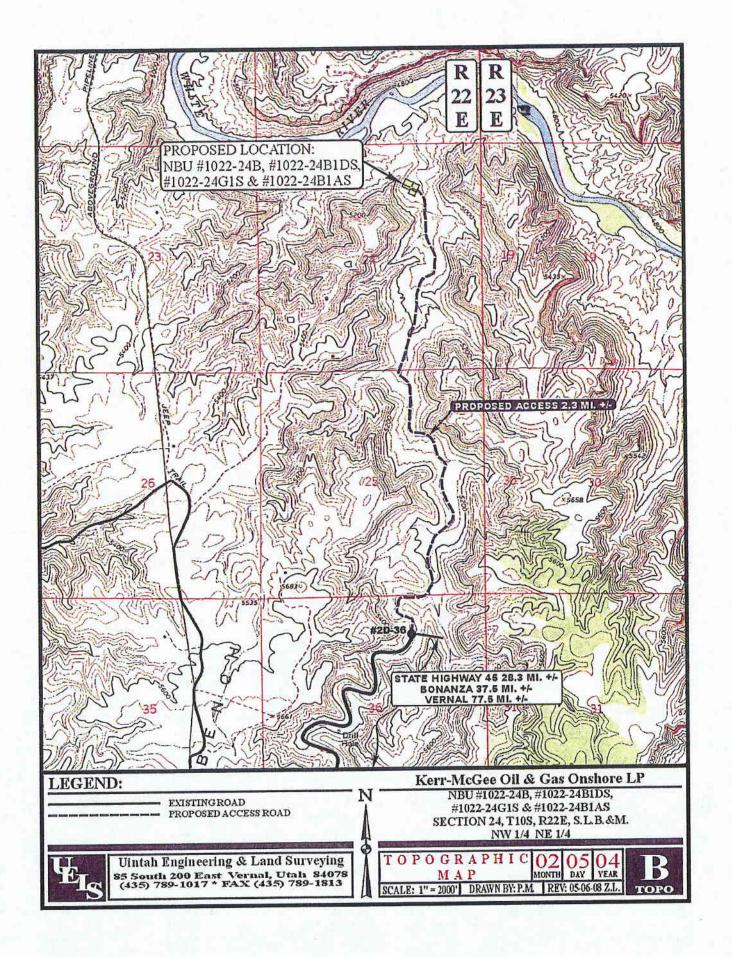


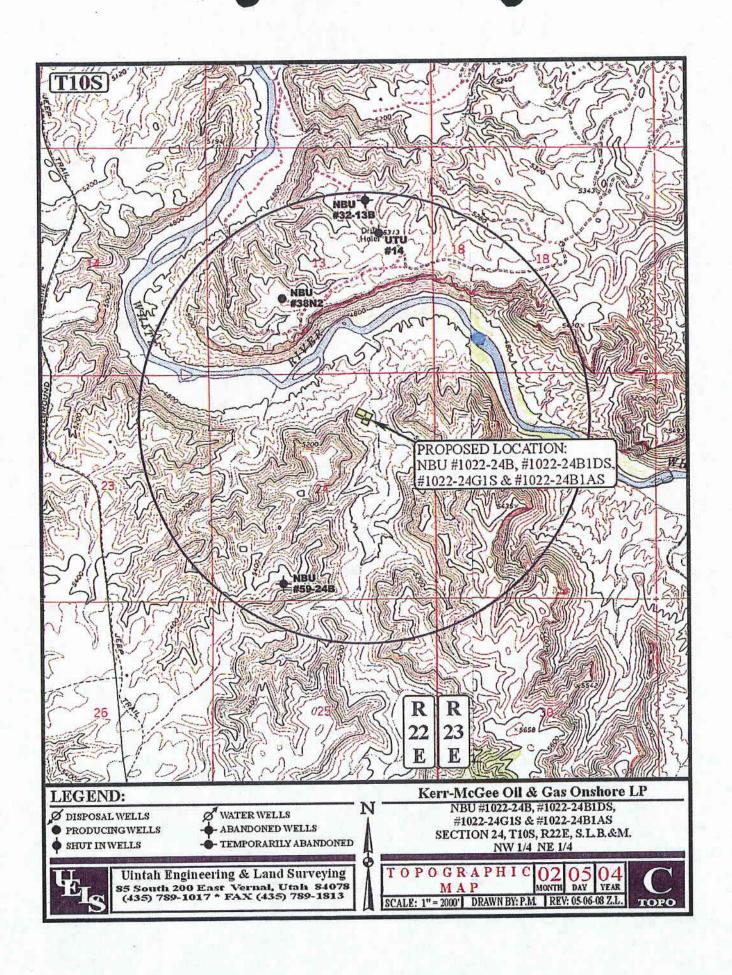
12 28 06 MONTH DAY YEAR PIPELINE PHOTOS PHOTO TAKEN BY: D.K. | DRAWN BY: B.C. | REV: 05-06-08 Z.L.

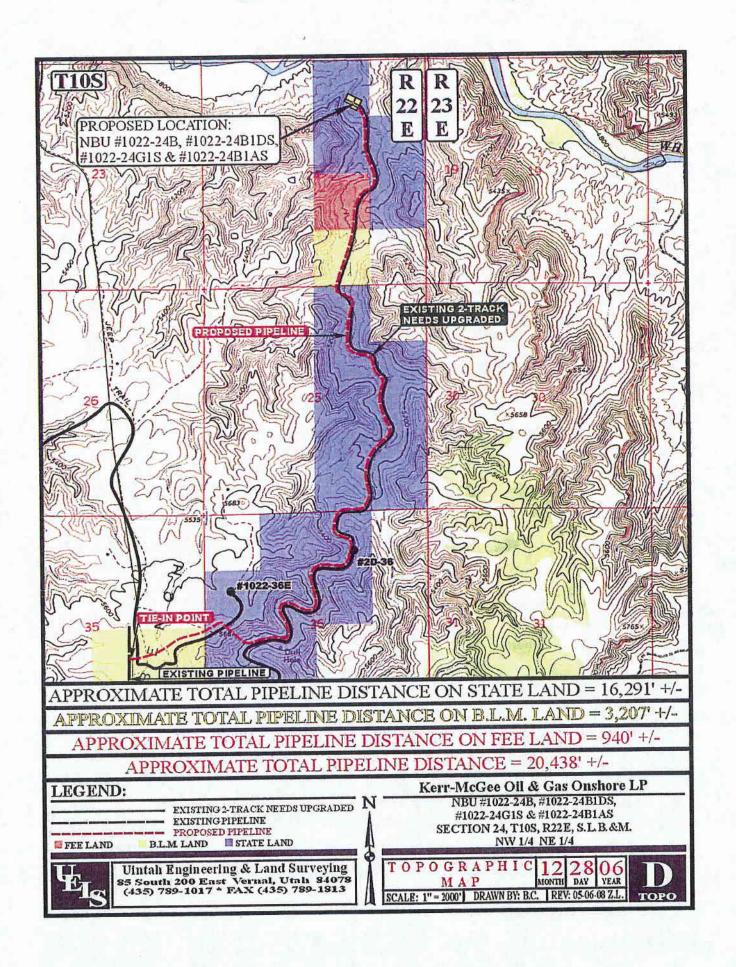


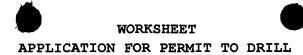




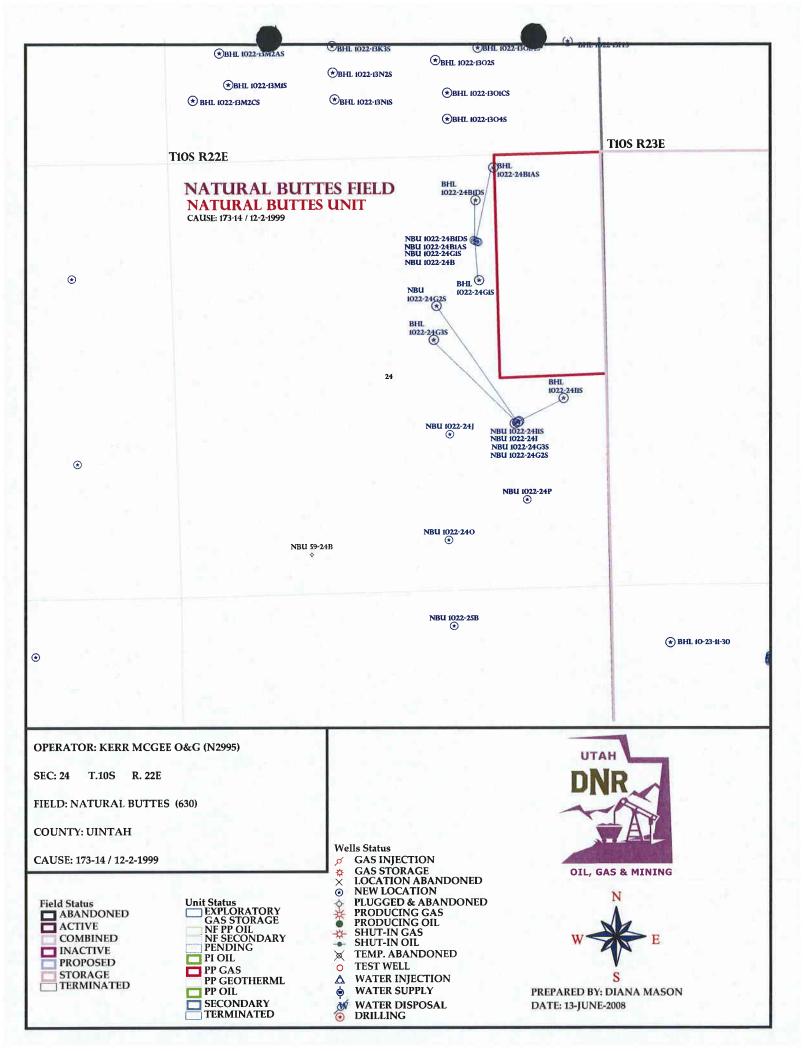








APD RECEIVED: 06/10/2008	API NO. ASSIGNED: 43-047-40129
WELL NAME: NBU 1022-24B1AS  OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  CONTACT: KEVIN MCINTYRE	PHONE NUMBER: 720-929-6226
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
NWNE 24 100S 220E	Tech Review Initials Date
SURFACE: 1052 FNL 1583 FEL BOTTOM: 0150 FNL 1375 FEL	Engineering DED 7/66
COUNTY: UINTAH	Geology
LATITUDE: 39.93881 LONGITUDE: -109.3838  UTM SURF EASTINGS: 638086 NORTHINGS: 4422007	Surface
LEASE TYPE: 3 - State  LEASE NUMBER: ST ML 23610  SURFACE OWNER: 3 - State	PROPOSED FORMATION: WSMVD COALBED METHANE WELL? NO
Plat Bond: Fed[] Ind[] Sta[] Fee[] (No. 22013542 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit (No. 43-8496 )  RDCC Review (Y/N) (Date: )  MA Fee Surf Agreement (Y/N)	LOCATION AND SITING:  R649-2-3.  Unit: NATURAL BUTTES  R649-3-2. General Siting: 460 From Qtr/Qtr & 920' Between Well  R649-3-3. Exception  Drilling Unit Board Cause No: 173.14 Eff Date: 12.2-1999 Siting: 440' Gr ubdr & uncomm. The  R649-3-11. Directional Drill
COMMENTS: Needs Q	) No 16 (09-01-08)
stipulations: 1- Stu 7- Ou	SHALE



# **Application for Permit to Drill**

# **Statement of Basis**

9/8/2008

# Utah Division of Oil, Gas and Mining

Page 1

APD No

API WellNo

Status

Well Type

**Surf Ownr** 

**CBM** 

811

43-047-40129-00-00

GW

S

No

KERR-MCGEE OIL & GAS ONSHORE, L.P. Surface Owner-APD

Well Name NBU 1022-24B1AS

Unit

Field

**UNDESIGNATED** 

Type of Work

Location

NWNE 24 10S 22E S 1052 FNL 1583 FEL GPS Coord (UTM) 638086E 4422007N

# Geologic Statement of Basis

Kerr McGee proposes to set 1,500' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 5,000'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 24. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

**Brad Hill** 

9/8/2008

**APD** Evaluator

Date / Time

# **Surface Statement of Basis**

The general area is Archy Wash located south of the White River in Uintah County, Utah. Vernal, Utah is approximately 37 air miles to the northwest and Bonanza, Utah approximately 12 miles to the northeast. Archy Bench is approximately 1 mile to the west and West Fork of Saddle Tree Draw 1-2 miles to the east. The topography in the area is characterized by steep sidehills bordering winding narrow to moderately narrow draws. Many side-slopes are rimmed with sandstone bedrock forming vertical cliffs. Numerous small side draws lead away from the main divides. All drainages are ephemeral only flowing during winter snowmelt and following intense summer rainstorms. Roads are commonly constructed in the bottom of the washes and are subject to washing out following runoff events. Erosion from side-slopes is moderate. No streams seeps or springs are known to exist in the area.

The proposed NBU 1022-24B1AS gas well is approximately 79.8 road miles south of Ouray, Utah accessed by Uintah County roads to within approximately 100 feet of the site where a new road will be constructed to the location.

The location is in the bottom of Archy Wash on a northeast side-slope of a high near vertical ridge, which begins near the southeast corner of the location. Several washes intersect the location and are planned to be diverted around the southwest end. The White River is approximately 1/4 mile down drainage. The location was originally laid out for one well, the NBU 1022-24B well that has been approved. The proposed pad has been enlarged and three additional wells have been added.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA was invited to the pre-site investigation. He did not attend, as he had no concerns pertaining to the previously staked location. The selected location appears to be the best site for drilling and operating a well in the immediate area.

Ben Williams representing the UDWR attended the previous pre-site. He at that time stated the area is classified as yearlong critical habitat for antelope. He stated that the lack of water not forage is the limiting factor affecting the herd in the area. He recommended no restrictions for antelope. No other wildlife is expected to be significantly affected. He gave Jim Davis of SITLA and Carroll Estes of Kerr McGee a copy of his wildlife evaluation and a UDWR recommended seed mix to be used when re-vegetating the location.

# **Application for Permit to Drill Statement of Basis**

9/8/2008

# Utah Division of Oil, Gas and Mining

Page 2

Floyd Bartlett

9/1/2008

**Onsite Evaluator** 

Date / Time

# **Conditions of Approval / Application for Permit to Drill**

Category	Condition
Pits	A synthetic liner with a minimum thickness of 20-mils with a felt subliner shall be
	properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.

# **Utah Division of Oil, Gas and Mining**

Operator

KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name

NBU 1022-24B1AS

API Number

40.045

43-047-40129-0

**APD No** 811 **Tw** 10S Field/Unit UNDESIGNATED

Location: 1/4,1/4 NWNE

Sec 24

Rng 22E

1052 FNL 1583 FEL

**GPS Coord (UTM)** 638073

4422011

**Surface Owner** 

#### **Participants**

Floyd Bartlett, David Kay (Uintah Engineering and Land Surveying) and Rayleen White (Kerr McGee)

## Regional/Local Setting & Topography

The general area is Archy Wash located south of the White River in Uintah County, Utah. Vernal, Utah is approximately 37 air miles to the northwest and Bonanza, Utah approximately 12 miles to the northeast. Archy Bench is approximately 1 mile to the west and West Fork of Saddle Tree Draw 1-2 miles to the east. The topography in the area is characterized by steep sidehills bordering winding narrow to moderately narrow draws. Many side-slopes are rimmed with sandstone bedrock forming vertical cliffs. Numerous small side draws lead away from the main divides. All drainages are ephemeral only flowing during winter snowmelt and following intense summer rainstorms. Roads are commonly constructed in the bottom of the washes and are subject to washing out following runoff events. Erosion from side-slopes is moderate. No streams seeps or springs are known to exist in the area.

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The location is in the bottom of Archy Wash on a northeast side-slope of a high near vertical ridge, which begins near the southeast corner of the location. Several washes intersect the location and are planned to be diverted around the southwest end. The White River is approximately 1/4 mile down drainage. The location was originally laid out for one well, the NBU 1022-24B well that has been approved. The proposed pad has been enlarged and three additional wells have been added.

Both the surface and minerals are owned by SITLA.

#### Surface Use Plan

**Current Surface Use** 

Grazing

Recreational

Wildlfe Habitat

**New Road** 

Miles Well Pad

**Src Const Material** 

**Surface Formation** 

0.01

Width 305

Length 410

Onsite

UNTA

Ancillary Facilities N

#### Waste Management Plan Adequate?

# **Environmental Parameters**

Affected Floodplains and/or Wetland N

# Flora / Fauna

Vegetation consists of big sagebrush, greasewood, spiny hopsage and broom snakeweed. Vegetation is sparse.

9/8/2008 Page 1

Antelope, rabbits, coyotes, and small mammals, birds and raptors.

# Soil Type and Characteristics

Soils are moderately deep rocky sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

# Drainage Diverson Required Y

Several washes intersect the location and are planned to be diverted around the southwest end.

## Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run?

Paleo Potental Observed? N

**Cultural Survey Run?** 

**Cultural Resources?** 

## Reserve Pit

Site-Specific Factors		Site F	Ranking		
Distance to Groundwater (feet)	100 to 200		5		
Distance to Surface Water (feet)	>1000		0		
Dist. Nearest Municipal Well (ft)	>5280		0		
Distance to Other Wells (feet)	<300		20		
Native Soil Type	Mod permeability		10		
Fluid Type	Fresh Water		5		
<b>Drill Cuttings</b>	Normal Rock		0		
Annual Precipitation (inches)	<10		0		
Affected Populations	<10		0		
Presence Nearby Utility Conduits	Not Present		0		
		<b>Final Score</b>	40	1	Sensitivity Level

# Characteristics / Requirements

The proposed reserve pit is 100' x 250' x 10' deep located in a cut on the southeast corner of the location. A 20 mil liner with a felt sub-liner is planned by Kerr McGee

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 20 Pit Underlayment Required? Y

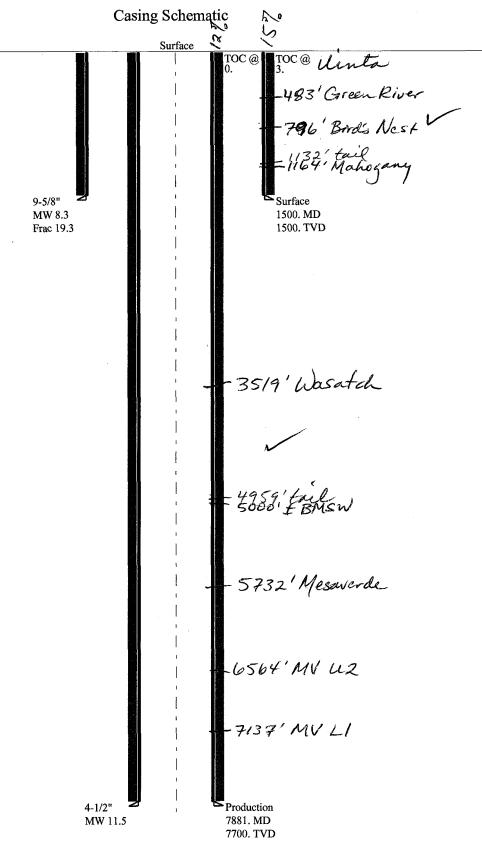
# **Other Observations / Comments**

Floyd Bartlett **Evaluator** 

9/1/2008

Date / Time

# 43047401290000 NBU 1022-24B1AS



Well name:

43047401290000 NBU 1022-24B1AS

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Surface

Project ID:

43-047-40129-0000

Location:

Uintah County, Utah

**Design parameters:** Minimum design factors: **Environment:** H2S considered? No **Collapse** Collapse: Mud weight: 8.330 ppg Design factor 1.125 Surface temperature:

Design is based on evacuated pipe.

75 °F 96 °F Bottom hole temperature:

1.40 °F/100ft Temperature gradient:

Minimum section length: 1,300 ft

Burst:

1.00 Design factor

Cement top:

3 ft

Burst

Max anticipated surface pressure: 1,320 psi

Internal gradient: 0.120 psi/ft Calculated BHP

No backup mud specified.

1,500 psi

Tension:

1.80 (J) 8 Round STC: 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:** 

1.50 (J) Premium: Body yield: 1.50 (B)

Tension is based on buoyed weight. Neutral point: 1,315 ft

Re subsequent strings:

Completion type is subs Non-directional string.

Next setting depth: 7,700 ft Next mud weight: 11.500 ppg 4,600 psi Next setting BHP:

Fracture mud wt: Fracture depth: Injection pressure:

19.250 ppg 1,500 ft 1,500 psi

End True Vert Measured Drift Internal Run Segment Nominal Capacity Length Size Weight Grade **Finish** Depth Depth Diameter Seq (ft) (ft) (in) (ft³) (ft) (in) (lbs/ft) 36.00 J-55 LT&C 1500 1500 8.796 651.1 1 1500 9.625 Collapse Burst **Burst Tension Tension Tension** Collapse Collapse **Burst** Run Strength Design Load Design Load Strength Design Load Strength Seq **Factor** (Kips) **Factor** (psi) **Factor** (psi) (psi) (Kips) (psi) 453 9.57 J 1 649 2020 3.112 1500 3520 2.35 47

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: (801) 538-5357 FAX: (801) 359-3940

Date: September 15,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43047401290000 NBU 1022-24B1AS

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Production

Project ID:

43-047-40129-0000

Location:

Uintah County, Utah

Design parameters: **Collapse** 

Mud weight: Internal fluid density: 11.500 ppg 2.330 ppg Minimum design factors:

1.125

Collapse:

Design factor

**Environment:** 

H2S considered? No 75 °F Surface temperature: 183 °F Bottom hole temperature:

1.40 °F/100ft Temperature gradient:

Minimum section length: 1,500 ft

**Burst:** 

Design factor

1.00 Cement top: Surface

**Burst** 

Max anticipated surface pressure:

2,906 psi 0.220 psi/ft Internal gradient: Calculated BHP 4,600 psi

No backup mud specified.

Tension:

1.80 (J) 8 Round STC: 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:** Premium: 1.50 (J)

Body yield:

Directional Info - Build & Drop

1.50 (B)

Kick-off point Departure at shoe: Maximum dogleg: Inclination at shoe:

Completion type is subs

1560 ft 925 ft 3 °/100ft 0 °

Tension is based on buoyed weight. 6,557 ft Neutral point:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	7881	4.5	11.60	1-80	LT&C	7700	7881	3.875	687.7
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	3668	6360	1.734	4600	7780	1.69	74	212	2.87 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Minerals

Phone: (801) 538-5357 FAX: (801) 359-3940

Date: September 15,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7700 ft, a mud weight of 11.5 ppg. An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

# **BOPE REVIEW**

# Kerr-McGee NBU 1022-24B1AS API 43-047-40129-0000

INPUT			<del> </del>	
Well Name	Kerr-McGee NBU 1	)22-24B1AS API 43	-047-40129-00	00
	String 1	String 2	2	
Casing Size (")	9 5/8	4 1/2		
etting Depth (TVD)	1500	7700		
revious Shoe Setting Depth (TVD)	20	1500		
ax Mud Weight (ppg)	8.4	11.5		
OPE Proposed (psi)	500	5000		
asing Internal Yield (psi)	3520	7780		
perators Max Anticipated Pressure (psi)	4886	12.2	ppg 🗸	

Calculations	String 1	9 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	655	
		BOF	PE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	475	YES Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	325	YES
		*Cai	an Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	330	- NO Resonable Veptu
Required Casing/BOPE Test	Pressure	1500 psi	
*Max Pressure Allowed @ Pr		20 psi)	*Assumes 1psi/ft frac gradient

Calculations	String 2	4 1/2	"		
Max BHP [psi]	.052*Setting Depth*MW =	4605			······································
			BOPE Add	equate	e For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3681	YE	S 🏏	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2911	YE	S	
			*Can Full	Expeç	cted Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	3241	≪→ N	0 1	Leasonable
Required Casing/BOPE Test	Pressure	5000	psi /		
*Max Pressure Allowed @ Previous Casing Shoe =		7500	psi 🗸		*Assumes 1psi/ft frac gradient



Kerr-McGee Oil & Gas Onshore LP 1099 18 Street, Suite 1200 Denver, CO 80202

June 16, 2008

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE:

NBU 1022-24B1AS

T10S-24E

Section 24: NWNE 150' FNL, 1375' FEL Uintah County, Utah

Dear Mrs. Mason:

Kerr-McGee Oil & Gas Onshore LP has submitted a permit to drill the captioned well to test the Wasatch and Mesaverde formations. The well is located at an exception location to Spacing Order 173-14. The well location was moved for topographic reasons. Kerr-McGee owns 100% of the leasehold within 460 feet of the exception location of the offset lands and has no objection to the exception location.

Kerr-McGee requests your approval of this exception location. If you have any questions, call me at 720-929-6262. Thank you for your assistance.

Sincerely,

Tason Rayburn Dandman

RECEIVED

JUN 18 2008

DIV. OF OIL, GAS & MINING

# **United States Department of the Interior**

# BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

June 16, 2008

## Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

# API# WELL NAME (Proposed PZ MesaVerde)

LOCATION

43-047-40136 NBU 921-20IT Sec 20 T09S R21E 1902 FSL 0822 FEL

43-047-40135 NBU 921-15MT Sec 15 T09S R21E 0697 FSL 0406 FWL 43-047-40134 NBU 922-31GT Sec 31 T09S R22E 1664 FNL 1349 FEL

43-047-40133 NBU 922-32CT Sec 32 T09S R22E 0809 FNL 2154 FWL

## (Proposed PZ Wasatch/MesaVerde)

43-047-40129 NBU 1022-24B1AS Sec 24 T10S R22E 1052 FNL 1583 FEL

BHL Sec 24 T10S R22E 0150 FNL 1375 FEL

43-047-40130 NBU 1022-24B1DS Sec 24 T10S R22E 1026 FNL 1637 FEL

BHL Sec 24 T10S R22E 0540 FNL 1605 FEL

43-047-40131 NBU 1022-24G1S Sec 24 T10S R22E 1044 FNL 1601 FEL

BHL Sec 24 T10S R22E 1515 FNL 1580 FEL

43-047-40141 NBU 1022-24I1S Sec 24 T10S R22E 2062 FSL 1130 FEL

BHL Sec 24 T10S R22E 2330 FSL 0585 FEL

43-047-40142 NBU 1022-24G3S Sec 24 T10S R22E 2037 FSL 1184 FEL

BHL Sec 24 T10S R22E 2225 FNL 2140 FEL

43-047-40140 NBU 1022-24G2S Sec 24 T10S R22E 2053 FSL 1148 FEL

BHL Sec 24 T10S R22E 1815 FNL 2100 FEL

Our records indicate the 1022-24B1AS, 1022-24B1DS, 1022-24G1S and the 1022-24I1 bottom hole location is closer than 460 feet from the Natural Buttes Unit boundary.

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:6-16-08

From:

Jim Davis

To:

Bonner, Ed; Mason, Diana

Date:

1/28/2009 10:59 AM

Subject:

APD approvals- A bunch of Kerr McGee

CC:

Garrison, LaVonne; Raleen.White@anadarko.com The following wells have been approved by SITLA including arch and paleo clearance.

Condition of approval: Spot-checking of pad construction/ extension for paleo resources:

NBU 1022-24B1AS

4304740129

NBU 1022-24B1DS NBU 1022-24G1S

4304740130 4304740131

and

NBU 1022-25J3S 4304750070 NBU 1022-25J1S 4304750069

NBU 1022-2502S

4304750071

No COA's:

NBU 1022-24G2S

4304740140

NBU 1022-24G3S

4304740142

NBU 1022-241IS

4304740141

FYI: These wells had been approved by SITLA previously. The APDs have been extended. Kerr McGee recently sent paleo reports to SITLA- there were no recommendations from the surveying paleontologist. Just in case anyone needs it, SITLA (still) approves of these APDs.

NBU 1022-25G

4304739142

NBU 1022-25G3S

4304740443

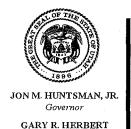
NBU 1022-25G4S

4304740442

NBU 1022-25G2S

4304740441

Jim Davis **Utah Trust Lands Administration** jimdavis1@utah.gov Phone: (801) 538-5156



Lieutenant Governor

# State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Director

January 28, 2009

Kerr-McGee Oil & Gas Onshore, LP P O Box 173779 Denver, CO 80217-3779

Re:

NBU 1022-24B1AS Well, 1052' FNL, 1583' FEL, NW NE, Sec. 24, T. 10 South,

R. 22 East, Bottom Location 150' FNL, 1375' FEL, NW NE, Sec. 24, T. 10 South,

R. 22 East, Uintah County, Utah

# Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40129.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc:

**Uintah County Assessor** 

**SITLA** 

Bureau of Land Management, Vernal Office



Operator:	rator: Kerr-McGee Oil & Gas Onshore, LP					
Well Name & Numb	)22-24B1AS					
API Number:		43-047-40129				
Lease:		ST ML				
Location:	NW NE	Sec. 24	T. <u>10 South</u>	<b>R.</b> <u>22 East</u>		
<b>Bottom Location:</b>	NW NE	Sec. 24	<b>T.</b> _10 South	<b>R.</b> 22 East		

# **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

# 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home

• Carol Daniels at: (801) 538-5284 office

• Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

# 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-047-40129 January 28, 2009

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
- 7. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 23610
SUNDR	RY NOTICES AND REPORTS (	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for propos bottom-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-24B1AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI	HORE, L.P.		<b>9. API NUMBER:</b> 43047401290000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Si	treet, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1052 FNL 1583 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NWNE Section: 24	P, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & Ga extension to this A	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  MPLETED OPERATIONS. Clearly show all pertings Onshore, L.P. (Kerr-McGee)  PD for the maximum time allow with any questions and/or coming	respectfully requests an wed. Please contact the ments. Thank you.	□ CHANGE WELL NAME □ CONVERT WELL TYPE □ NEW CONSTRUCTION □ PLUG BACK □ RECOMPLETE DIFFERENT FORMATION □ TEMPORARY ABANDON □ WATER DISPOSAL ✓ APD EXTENSION OTHER:    Olumes, etc.    Approved by the Utah Division of Oil, Gas and Mining     ate: January 25, 2010   y:   January 25, 2010
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE  Regulatory Analyst	
Danielle Piernot  SIGNATURE N/A	720 929-6156	Regulatory Analyst  DATE 1/25/2010	



# The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

# Request for Permit Extension Validation Well Number 43047401290000

**API:** 43047401290000 Well Name: NBU 1022-24B1AS

Location: 1052 FNL 1583 FEL QTR NWNE SEC 24 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued:** 1/28/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not requ

uire revi	sion. Following is a checklist of	some items related to the applicati	on, which should be verified.
	ited on private land, has the ow ed?  Yes  No	nership changed, if so, has the sur	face agreement been
	any wells been drilled in the vici requirements for this location?	inity of the proposed well which we	ould affect the spacing or
	ere been any unit or other agre proposed well? 🕡 Yes 🍺 I	ements put in place that could affe	ect the permitting or operation
	there been any changes to the a the proposed location?	ccess route including ownership, c s 📵 No	or rightof- way, which could
• Has th	ne approved source of water for	drilling changed? 📗 Yes 📵 No	<b>o</b>
		s to the surface location or access seed at the onsite evaluation?	
• Is bor	iding still in place, which covers	this proposed well?  Yes	Approved by the No Utah Division of Oil, Gas and Mining
nature:	Danielle Piernot <b>Date</b>	: 1/25/2010	
Title:	Regulatory Analyst Representing	: KERR-MCGEE OIL & GAS ONSHORD,	<u>te:</u> January 25, 2010

Sig

By: Dally

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 23610
SUND	RY NOTICES AND REPORTS ON	I WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-24B1AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		<b>9. API NUMBER:</b> 43047401290000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	PHONE N Street, Suite 600, Denver, CO, 80217 3779	UMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1052 FNL 1583 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & G extension to this A	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF	espectfully requests an ed. Please contact the ents. Thank you.	CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  ✓ APD EXTENSION  OTHER:  Olumes, etc.  Approved by the  Utah Division of  Oil, Gas and Mining  02/03/2011  y:
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER	TITLE Regulatory Analyst	
SIGNATURE	720 929-6156	DATE	
N/A		1/28/2011	



# The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

# Request for Permit Extension Validation Well Number 43047401290000

**API:** 43047401290000 **Well Name:** NBU 1022-24B1AS

Location: 1052 FNL 1583 FEL QTR NWNE SEC 24 TWNP 100S RNG 220E MER S

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**Date Original Permit Issued:** 1/28/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

uire revision. Following is a checklist of some items related to the application, which should be verified.
<ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No</li> </ul>
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: Danielle Piernot Date: 1/28/2011

inature: Danielle Piernot Date: 1/28/2011

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.



# State of Utah

# DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 10, 2012

Kerr McGee Oil & Gas Onshore, L.P. P.O. Box 173779 Denver, CO 80217

Re:

<u>APD Rescinded – NBU 1022-24B1AS, Sec. 24, T. 10S, R. 22E</u> <u>Uintah County, Utah API No. 43-047-40129</u>

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 28, 2009. On January 25, 2010 and February 3, 2011 the Division granted a one-year APD extension. On February 10, 2012, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 10, 2012.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

cc: Well File

SITLA, Ed Bonner

